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ABSTRACT

One of a set of high school curricula on nuclear issues, this 10-day unit for English classes informs students of the issues surrounding the nuclear arms race and military spending. Each lesson includes readings, worksheets, and a daily homework assignment and focuses on one of the following activities: discussion, brainstorming, role playing, or problem solving. Topics covered in the 10 lessons are conflict and resolution, countries at war, nuclear powers, Hiroshima and its survivors, limited nuclear war, civil defense preparation, perceptions of national security, tax allocation, and quality of life. A culminating activity explores options open to society for avoiding nuclear war. A bibliography and lists of informational, curricular, and audiovisual materials conclude the packet. (LP)

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CROSSROADS

Quality of Life in a Nuclear World

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A High School English Curriculum

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Jobs with Peace is a nationwide organization that examines the effects of the nuclear arms buildup, foreign military intervention and military spending on our everyday lives. The Education Task Force of Jobs with Peace is composed of teachers in a variety of educational activities.

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INTRODUCTION

The threat of nuclear war, the economy, the arms race, military spending, and our quality of life are interrelated issues that affect our students deeply. Educators must help their students discuss and understand such important issues. For them to become conscientious and active citizens, we need to develop their ability to evaluate issues and information, so they can make educated decisions. This is true for each applied subject area—science, English, math and social studies.

"I am very scared, very, very scared. Because with a nuclear war you don't have a chance to survive."

"How do we know what is going on? That's what's so scary. It seems like the whole future of the world is in the hands of ten people."

"These days, I just try not to think about my future, because I have a hard time seeing one. I want a good education but we're losing teachers and programs left and right. There aren't any jobs and there isn't any money for me to go to college. I want to do something with my life, but who cares about me? Besides, we're all going to get blown up anyway."

Such statements by high school students express the widespread and profound concern of our youth about the threat of nuclear war to their future lives. They also reflect the confusion and powerlessness students feel in these politically and economically troubled times. Clearly, we must help our students address these issues.

Goals of the Curriculum

This curriculum was developed to inform students of the issues of nuclear war and military spending, and to help them overcome feelings of helplessness and powerlessness. The aim is open discussion. We want to encourage students to make decisions and act on them. Our general goals are:

- To air and deal with students' fears, thoughts and questions about nuclear war
- To understand why individuals, groups and nations have conflicts and to explore methods of resolving them
- To explore reasons for the nuclear weapons buildup
- To understand the effects of a nuclear explosion
- To discuss how military spending affects our economy
- To encourage students to form rational opinions and act on them as productive citizens

Classroom Climate

Teaching about nuclear war can be an extremely sensitive and powerful experience. Students may have strong feelings about some topics discussed. It is important that students feel they can freely express their feelings and views. Teachers can set this tone by:

- Encouraging students to listen to what another says, whether or not he or she agrees with it
- Urging students to share their feelings (Teachers can help by sharing their own feelings.)
- Differentiating between fact and opinion
- Asking questions that help students clarify their own thoughts and feelings
- Encouraging students to continue these discussions with family and friends
- Opening themselves to questions

- Making students aware that they don't know everything about nuclear war and that nobody does

After a heated discussion, stop and assess students' feelings. For each day, provide such an activity. Additional activities you may want to use include the following:

- A whip statement. After a provocative session, give students a phrase and tell them to complete it with the first thing that comes to mind. Go around the room very quickly so they do not stop and think. Say, "This activity makes me feel . . .," having each student finish the statement.
- Ask students to write a "Dear Abby" letter expressing their feelings. Collect the letters, redistribute them for students to answer. Then, recollect them and read the letters and responses aloud.
- Have students quickly write down their feelings after an activity. Go around the room and have students share what they wrote. Then, discuss the thoughts.
- Have students draw pictures of what an activity made them feel. Share and discuss the pictures.

Teaching Approach

The curriculum centers on discussion, roleplaying, brainstorms, and problem-solving. Each lesson plan includes readings and worksheets. There is also a daily homework assignment. Each lesson starts by reviewing the previous night's homework.

We strongly encourage you to have students maintain a journal throughout the two weeks. The journal provides students with an outlet for their feelings and you with a means of evaluation. You can make it part of each night's homework assignment, or you can provide ten minutes at the end of each class for journal-writing. You can allow free expression or suggest specific writing assignments.

The activities of Day Ten are crucial. During the curriculum, some students may feel powerless. It is important to instill a sense that they can affect our society and the world. They need to feel that their opinions and decisions are important. Therefore, they need to be given suggestions about how they can act, whichever side of an issue they may be on. More important, they need to be given the time and encouragement to decide how they will express themselves.

Structure of the Curriculum

"Crossroads" is divided into three units—English, science, and social studies. This allows specific skills to be developed while the issues of nuclear war are addressed.

Each unit is a comprehensive two-week course. However, if time is limited, we encourage you to choose the most appropriate activities and lessons. We also urge you to read all units to find additional activities you like.

Each lesson includes a plan sheet and student worksheets. The lesson plan contains objectives, descriptions, and directions for the day's activities. Students' worksheets contain the readings and worksheets for that day. They are numbered in order of use. For example, Worksheet 3b would correspond to the second activity sheet used in Day Three.

There is a wealth of material available on these issues. A list of resources is in the Appendix. We believe in dialogue and presenting different perspectives. Educators must provide students with as much relevant information as we can to help them formulate their own opinions. Because the curriculum is short, we encourage you to supplement "Crossroads" with additional materials, resources, or speakers.

After your class completes the curriculum, please fill out the evaluation form at the end of this introduction and mail it to us. This will help us make revisions. Also, feel free to contact us if you have any questions or comments. The address and phone number are on the back cover.

EVALUATION

1. Circle the curriculum you used: Social Studies Science English

2. How many students were involved in the curriculum?

3. Did you use the curriculum as a whole or in bits and pieces? Did you include activities from other curricula? If so, which?

4. How many days did you spend on the curriculum?

5. What was the general response of your students?

6. Which activities were most successful for you?

7. Which activities were least successful?

8. What additional types of materials or speakers did you use?

9. Do you have any further comments or criticisms?

Please send to
Jobs with Peace, 77 Summer St., Room 1111, Boston, MA 02110

OVERVIEW

The arms race, social service cutbacks, the U.S. military budget, and the "Soviet threat" are in the news every day. No responsible citizen can ignore them.

As English teachers, part of our task is to help students examine their thoughts, to learn to evaluate information critically, and to express their feelings and opinions. As well as exploring these issues, this curriculum focuses on developing basic English skills. Students are asked to read, write and analyze various styles of writing such as poetry, newspaper articles, editorials, songs and descriptive paragraphs. Simultaneously, students improve their skills in sequencing, finding the main ideas, summarizing, separating fact from opinion and drawing conclusions. The acquisition of these skillls and information enables students to make informed choices about issues that will directly affect their lives.

Day One: Students complete individual surveys of their attitudes toward key concepts in the curriculum. Then they explore conflict, escalation and resolution, before writing a skit about conflicts between individuals.

Day Two: Using a daily newspaper, students continue examining conflict and resolution between groups and nations. Through a simple game, they explore negotiation.

Day Three: Students identify countries at war and countries possessing and potentially possessing nuclear weapons. Through writing their own short poems, students express their feelings about nuclear war. Finally, they review the history of the arms race.

Day Four: Through pictures and personal accounts of the bombings of Hiroshima and Nagasaki, students learn about the effects of atomic explosions. Acting as reporters, they write accounts of the possible effects of a nuclear blast in their own neighborhood.

Day Five: Students research and debate whether we can survive a nuclear war.

Day Six: Students compare civil defense plans from the 1950s and 1980s and evaluate their effectiveness. They discuss differing perceptions, focusing on American attitudes towards the Soviet Union. Then, students read the words to two songs as examples of attitudes toward the threat of nuclear war.

Day Seven: Through activities with editorials and political cartoons, students compare different viewpoints about what constitutes national security, military vs. social spending, and the impact of military spending on the economy.

Day Eight: Students simulate a Congressional budget hearing. They then examine the actual U.S. budget and compare it to the ones they developed.

Day Nine: By examining the distribution of federal monies, students evaluate what careers will be open to them. They discuss differing views about the role government should play in our society.

Day Ten: After a summary of the curriculum's concepts, students repeat the survey done in Day One. They then voice views they have formed and choose a form of public action to express those views.

DAY ONE:

Conflict and Resolution

Objectives

To help students express their thoughts and feelings about nuclear war
To understand the concepts of conflict, escalation and resolution
To explore ways to resolve conflict

Materials

Photocopies of student worksheets

Activities

A. Explain to students that they are going to begin a unit examining the issues of nuclear war and the arms race and how they affect society. Hand out copies of the survey (1a) and read them together. Students should circle A if they agree with the statement or D if they disagree with it. Collect the surveys, tally the results, and save them. At the end of the unit, students will do the survey again to see how their attitudes have changed.

B. Explain to students that to talk about war, we must talk about conflicts—how they arise and how they may be resolved. Conflicts may occur on many levels—between two people, within a family, between groups, and between nations. Hand out copies of the short story "Late for School" (1b), and have students read it aloud. Write CONFLICT, ESCALATE and RESOLUTION on the board and have students define each word. Refer to the definitions below, if necessary:

Conflict: a controversy, disagreement, opposition
Escalate: to increase, enlarge, intensify
Resolution: a solution, a course of action determined or decided upon

Then discuss the following:

- What is the basic conflict?
- How did it begin?
- How did each character escalate the conflict?
- What is the climax of the story?
- Is there a resolution to the conflict?

Give students ten to fifteen minutes to write their own endings to the story. Have them share their conclusions with the class. Discuss:

- Was the conflict further escalated before it was resolved?
- Did any students end the story in violence? If so, why?
- Do the resolutions seem realistic? Why or why not?
- Is there any pattern in the resolutions? If so, what?
- Are there any other possible resolutions?

C. Write CONFLICT on one half of the board and RESOLUTION on the other. Ask students first to brainstorm conflicts people get into (for example, owing someone money, competing for a boy/girlfriend, parents disagreeing about how to raise a child). Write these on the board under CONFLICT. Then ask students to brainstorm ways to resolve a conflict (for example, fighting, discussing, choosing a mediator, flipping a coin). Write these under RESOLUTION. Ask which resolutions seem most constructive. Star these.

- Why do some resolutions seem more constructive than others?
- What makes a resolution constructive?
- What are the qualities of less constructive resolutions?

D. Hand out the Dialogue Sheet (1c) and divide students into pairs. Tell each pair to write a play about a conflict and resolution. Each pair should pick a conflict from the board. Then each should fill in the top of the sheet with the play's time, place and characters.

One student will write an opening line. The other will read it and write a responding line. This exercise should be done silently once the dialogue writing has begun. Tell students they must come to some kind of resolution. Give them fifteen to twenty minutes to write the scenario. When they have finished, ask for volunteers to read aloud or act out their plays. After each reading, ask students to identify the conflict, escalation (if any), and resolution. Have the class suggest alternative resolutions.

E. Ask students to look for three newspaper articles about conflict between individuals, groups, sports teams, or nations. Encourage students to find articles about three different types of conflict. Tell them to be prepared to describe the nature of the conflict and the principal characters involved.

Notes:

STUDENT SURVEY SHEET

1. Nations usually go to war to settle their disagreements.	A	D
2. The Soviet Union wants to destroy the United States.	A	D
3. If a nuclear war started, it would probably take place in Europe.	A	D
4. There are more nuclear weapons in the world than we need.	A	D
5. Nuclear weapons used against another country will not harm people in the United States.	A	D
6. The Soviet Union wants to take over the world.	A	D
7. There can be no such thing as a "limited" nuclear war.	A	D
8. The United States wants to take over the world.	A	D
9. The United States should build fewer nuclear weapons and more conventional weapons, such as tanks and bombers.	A	D
10. The Soviets are more likely than the Americans to start a nuclear war.	A	D
11. The use of nuclear weapons is inevitable.	A	D
12. Other countries should develop nuclear weapons.	A	D
13. Everyone in the United States gets a good education.	A	D
14. The United States should spend less money on the military and more money on domestic needs like housing and education.	A	D
15. One person can affect the course of the future.	A	D
16. The United States has enough money to provide good housing, health care and education for all its citizens.	A	D
17. People should get more involved in decisions made by the government.	A	D
18. Students have a real voice in what is happening in the world.	A	D
19. The only way to ensure national security is to build up the military.	A	D

1b

LATE FOR SCHOOL

Joey woke up late. He knew it was late even before he looked at the clock. He felt as though his brain was fogged in, but he could vaguely remember yelling back at his mother when she had tried to get him up. Right. She'd slammed the door and he'd thrown a pillow at her retreat. There it was, on the floor.

Oh, man, if he didn't make it to first period on time he'd be in big trouble. He knew he could con his homeroom teacher with some lame excuse, but Carney was a tough old bird. Muttering to himself, Joey threw on jeans and a blue and white football jersey with the number four on the back. On the way through the kitchen, he grabbed a few gulps of milk from the half gallon in the fridge and bounded up Cedar Street just in time to see his bus pulling away down Broadway. He yelled something obscene at the bus driver and began to jog.

By the time he reached the parking lot behind the high school, he was feeling pretty good. The run had cleared his brain out and given his body new energy. He'd even enjoyed seeing some of the trees along the way turning gold and scarlet under the bright October sky. Maybe Carney wouldn't make a big deal of it; after all he was only going to be a couple of minutes late.

Joey stopped to catch his breath, bending over with his hands on his knees, puffing hard through puckered lips.

"Are you a jerk or a jock? Or are you just blowing lunch on your shoes?"

Joey looked up to see Chris Martin leaning against a car. He was cutting his first period study hall, as usual, for a morning smoke. Because Chris had never gone to the study since the first day of school, the teachers never knew enough to mark him absent. Joey secretly envied Chris his good luck, or cleverness, in finding such a convenient crack to fall into.

Joey straightened up and glared, thinking that Chris wasn't such a bad kid, but once he gets the upper hand, he never lays off a person.

"Shove it, Martin!"

"Yeah? Maybe you'd like to come over here and show me just *where* you'd like me to shove it, pretty boy."

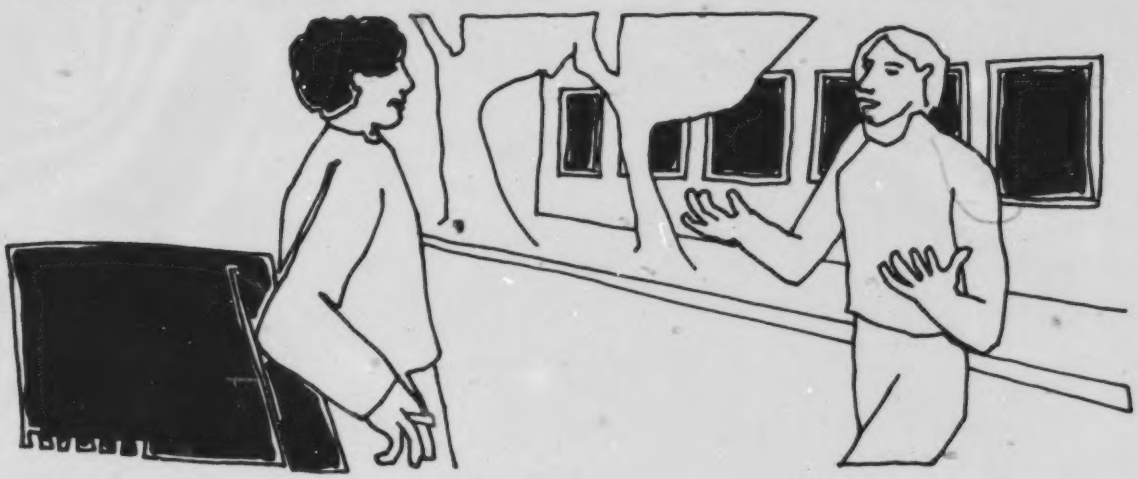
Great, thought Joey, just what I need. Walk away now and deal with his crap later or deal now, get it over with, and really be late.

"Hey, lay off, loser," Joey said, taking a few steps toward the other boy. "I'm just trying to get in there without having Carney all over my case," he wanted to add, but at the same time felt he didn't owe the other boy any explanation. What he didn't know was that Chris Martin had just been suspended because the office had finally figured out that he *was* supposed to be in that study hall all along.

If Joey had just kept walking, probably the whole thing wouldn't have happened. But he couldn't help himself. After the first few steps, he stopped, squaring off to face Chris, demanding a response with his pose and gestures and all the subtle, unconscious habits of one-upmanship. On another day, the response might been just another remark. But today was different. Chris walked right up to him and screamed in his face.

"Who you callin' loser, you dirty little pansy, you momma's boy!"

That did it. This bum knew where to hit where it hurt the most. Sure, Joey was close to his mom, had been ever since his father. . . . But all that didn't matter now. All that mattered was that this scum was going to louse up his whole day.



DIALOGUE SHEETS

You and your partner are going to write a short play about a conflict between two people and how that conflict is resolved. You may use some of the ideas we discussed in class or you can develop a new one of your own. Fill in the time and place of your play and descriptions of the two characters. Student No. 1 will write the opening line(s) and then pass the paper to student No. 2. Student No. 2 will write a responding line and hand it back, and so on, until you have resolved the conflict. This should be done silently, once you have agreed to the general outline.

Time:

Place:

Character No. 1:

Character No. 2:

What is the conflict?:

Dialogue

Character No. 1:

Character No. 2:

DAY TWO:

To Fight or Not to Fight

Objectives

To explore reasons for national and international conflicts and resolutions
To explore ways to resolve conflicts without escalation

Materials

Photocopies of student worksheets
A dollar bill

Activities

A. Review homework. Ask students to take out their newspaper articles. Tell them they will learn a method of reading newspapers and how to write news stories. Discuss:

- How difficult was it to find articles about conflict?
- What kind of conflicts did you find?

On the board, write CONTROVERSY, PROTEST, DENY, ATTACK, SCUFFLE, THREAT, FIGHT. Tell students that these words indicate that a conflict exists. See if they can list any others. Now write WHO, WHAT, WHERE, WHEN, HOW, WHY. Explain that when reading or writing an article, it is important to answer these questions. Give them five minutes to write the answers to these questions for one of their articles. When they have finished, ask for a volunteer to summarize her/his article quickly, answering the questions on the board. Then ask the class to hand in their answers and articles.

B. Tell the students that conflicts between countries and conflicts between groups are similar to those between two people. Hand out news articles (2a and 2b). Read them aloud and then discuss:

- Identify who, what, where, when, how, and why.
- What is the main conflict?
- Does the conflict escalate? If so, how?
- How is the conflict resolved?
- Is the resolution constructive? Why or why not?
- How are these conflicts similar to and different from those between individuals?
- Why would a country escalate a conflict?

C. Play the Dollar Game (see Teacher Resource Sheet 2c). In introducing this game, do not reveal the purpose, which is to explore ways of resolving conflicts other than escalation. Tell students that conflicts and war often start over money. Today, they will play a game about a conflict over money. When they have finished, discuss the following questions:

- What were your immediate reactions to bidding?
- At what point did you realize that bidding higher and higher doesn't work in your favor?
- Do you think people will automatically compete when any situation such as this comes up? Why or why not?
- Do you think countries respond to conflicts in this way? Why or why not?
- How did negotiations help both sides? Do you think this would be the same between countries? Why or why not?

D. Homework: Remind students of the different kinds of conflicts and resolutions they have studied, and that some conflicts escalate and others do not. Hand out the fact sheet about a conflict between two countries with fictitious names (2d). Ask students to write a news article based on these facts, and make up their own resolution. Do not tell them until the following day that the fact sheet is about the Falkland crisis between Argentina and Great Britain.

Notes:

The 'Agege boys' - a strain for Ghana

By Nick Kotch
Reuter

ACCRA, Ghana – The "Agege boys" are back from Nigeria, and with brutal suddenness Ghana's problems have increased by hundreds of thousands.

Agege is the name of the Lagos suburb where young Ghanaians flocked in recent years, escaping the shortages and hardships of their homeland.

Expelled by Nigeria as illegal aliens, the deportees have been streaming home all week, hungry, exhausted and often sick after harrowing journeys by land and sea. As they trudge along Accra's dusty streets with battered cases balanced on their heads, passers-by regard them with a mixture of pity and resentment.

Nigeria, rich from oil revenue, stood for ambition and sometimes danger, but above all for the naira, the currency the immigrants spent, mostly on coveted consumer goods.

Now they have been kicked out of "Nairaland" with only two weeks' notice, and Ghana is still the economically broken country they left. Job prospects are no better than before, beer and cigarettes are just as hard to find, and Ghana's currency, the cedi, still has minimal buying power.

"The expulsion has created a national crisis for Ghana," said Interior Secretary Johnny Hansen.

Officials and diplomats in Accra estimate that at least 500,000 deportees have already returned, although the Labor Ministry said yesterday that 900,000 had been registered.

Hundreds of thousands more are still in Nigeria, presumably as legal aliens, but nobody knows how many will come home in the face of hostility. There were thought to be between one million and 1.5 million Ghanaians in Nigeria before the expulsion order.

Ordinary Ghanaians are as shocked as the ruling Provisional National Defense Council about the speed of the mass expulsion. They recall that when Ghana ordered hundreds of thousands of Nigerians to leave 13 years ago, they were given three months.

Many deportees and observers felt the Nigerian presidential elections later this year and the Lagos government's dislike of the military government of Flight Lt. Jerry Rawlings were the reasons for Nigeria's harsh, two-week deadline.

The exodus forced the ruling council to reopen Ghana's border with Togo, which it had closed four months ago, to the intense displeasure of West African states, in a bid to combat smuggling.

But before the border was reopened, tens of thousands of Ghanaian deportees had assembled, waiting for days in deplorable conditions, often without food and drinking water.

The delay, diplomatic sources said, was due to the ruling council's fear that mercenaries alleged to have been hired by exile Ghanaian groups would infiltrate the evacuees and launch a coup. The threat is taken seriously in government circles but when Hansen visited the evacuees in Benin last week, they greeted him with angry cries of "Open the border!"

Despite acts of generosity toward the deportees, many Ghanaians have expressed resentment about the funds being diverted for the welfare of the returnees.

"These are all boys who left a sinking ship, and now they're screaming to get back on board," said a postal worker in Accra.

Ghanaian newspapers are full of reports of acts of violence by the deportees, who were blamed by the Lagos government for 50 percent of Nigeria's high crime rate. Their ingratitude and often rude and violent behavior was criticized by Commodore Steve Obimpeh, head of the repatriation task force.

"Ghanaians are not criminal people. But when I see some of them, I think they're not Ghanaians any more. They have hardened in Lagos," he said.

The government's plan is to incorporate the deportees swiftly into an existing national mobilization program to boost food and cash-crop production.

Rawlings, in his only statement so far on the crisis, called on traditional chiefs last week to release farming land for the deportees.

Diplomatic sources say Ghana will face a serious food shortage after the next harvest and will need substantial foreign help in grains and cereals now that there are even more mouths to feed.

It remains to be seen if young men who left the farms for Nigeria will adjust to the tough village life. Moreover, Nigeria needs Ghanaian skills, which kept vital sectors like the construction industry working, and many of the deportees might go back when the heat is off.

C-16 The Providence Sunday Journal, February 6, 1983

Union leader criticizes sludge-shoveling duties

By PETER LORD
Journal-Bulletin Staff Writer

PROVIDENCE — The head of the union representing workers at the Fields Point sewage treatment plant says he plans to complain to state health officials because workers are being forced to shovel sewage sludge out of a window at the plant.

An official of the Narragansett Bay Commission, which runs the plant, confirmed Friday that workers have been shoveling the sludge for about a week because a conveyor belt broke down. But he insisted the workers' health is not threatened.

Sludge is the solid material drawn from the sewage by truck-sized devices called coil filters. Up to 50 tons a day is produced at the plant. A conveyor belt takes the sludge from the filter building to a truck outside, which transports it to the state's central landfill.

But the conveyor belt broke down Tuesday, according to Daniel P. O'Connor Jr., the commission's assistant director for operations.

"Tuesday night I met with the belt manufacturer and put an order in. We were supposed to have it installed by Friday," O'Connor said. "But the truckers' strike delayed the delivery and now we expect it will be installed Monday morning."

"So we devised a chute and the guys have to use a squeegee or shovel to push it out the window and into the loader. We have a certain amount of sludge we have to move to keep ahead of things."

O'Connor said he didn't think the jury-rigged system posed any more of a health hazard than the conveyor belt carrying the sludge out of the room.

But Joseph Virgilio, president of Local 1033 of the Public Service Employees Union, said "I'm going to appeal to the Department of Health and the State Department of Labor. These people don't want to walk off the job, but they can't be subjected to this."

Virgilio was highly critical of the Bay Commission's management of the plant since it took over last May. "The management staff is top-heavy and they've got supervisors with nothing else to do but write reprimands."

He said he has filed an average of a half dozen grievances a day for the last several months.

But O'Connor said he could recall only a half dozen grievances in total during the past several weeks.

THE DOLLAR GAME

This demonstrates that bargaining, compromise, and negotiation can help everyone. Two teams compete for the same goal--a $1 bill—and their efforts to outbid each other do not result in a gain.

Rules: Get two volunteer groups of four students on a side. Hold up a dollar and tell them you will give it to the side that makes the highest bid. *Both sides* must give money they bid to you, regardless of whether they get the dollar. Flip a coin to see which side goes first.

After one side bids a few cents, the other side will bid higher. Both sides may bid as high as they want to go, until they reach 99¢. At some point, they will see their folly! After one side goes over 50¢, it may become apparent that *you* will gain at the next bid, since the sum of the two bids will be more than $1. One side may even begin to negotiate with the other at an earlier point.

After playing one time, discuss the strategies that the group used. Suggest that there are ways that both groups could gain. If they didn't negotiate the first time, play again.

Both sides can gain if they negotiate early so that each side bids less than 50¢. They split the dollar, and you lose.

A Conflict Between Two Countries

(Cayer and Resbalandia)
Over the Ownership of the Sheepsian Islands

History

1592 • Sheepsian Islands first sighted by Cayer navigator John Davis
1770 • Spanish troops land and claim islands for Spain, almost causing war with Cayer
1816 • Resbalandia won independence from Spain and claimed islands
1883 • Islands reclaimed as colony by Cayer
• Hostility between Cayer and Resbalandia over ownership of islands continues; both countries claim they discover this group of islands
1947 • Unsuccessful effort to settle conflict between Cayer and Resbalandia through International Court of Justice
1965 • Conflict brought before the United Nations
1970 • Talks begin and last until early 1982; no agreement reached on ownership and 1800 Sheepsians refuse to give up Cayer citizenship

Location and Resources

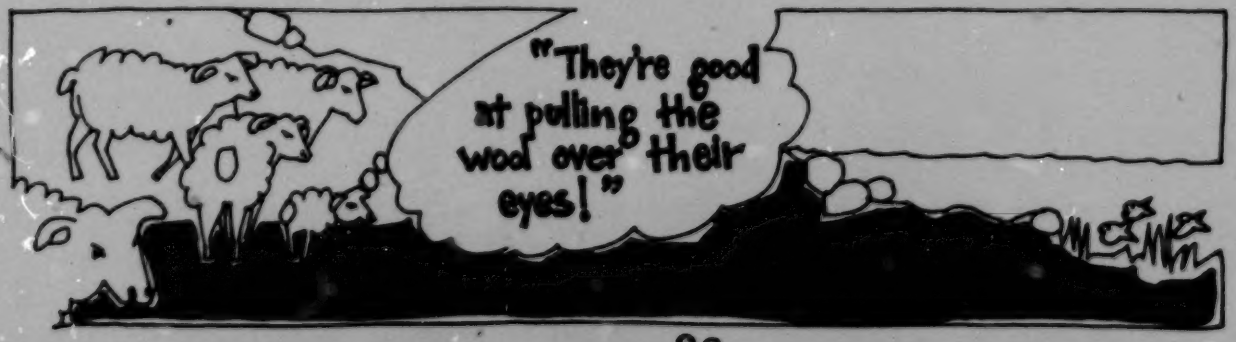
- South Atlantic Ocean
- 250 miles west of Resbalandia
- 200 islands totalling 4,697 square miles
- Two main islands E. Sheepsia and W. Sheepsia (includes 98% of land area)
- Oil discovered in waters between islands and Resbalandia mainland
- Cool waters rich in marine life

Population

- Approximately 2,100
- Almost all of Cayer descent

Economy

- Predominantly sheepherding, wool processing, hides and skins
- Fishing industry second largest industry
- One half land by Sheepsia Island's Co. (Cayer-owned)
- Second largest landowner is the Cayer Crown



Colonial Government
- Sheepsia Islands ruled as Cayer colony for almost 150 years
- Governor appointed by Queen of Cayer
- Locally elected Council
- Immigration tightly restricted
- Resbalandians need special permission to buy land

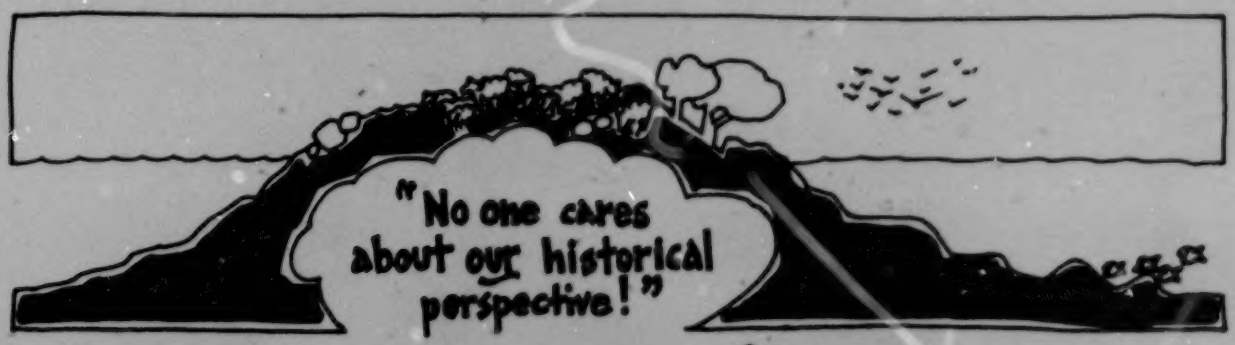
How Hostility Between the Two Nations Developed
- After Resbalandia gained independence from Spain, Cayer got more control over Resbalandia economy
- Cayer money built railroads, factories, roads
- Resbalandia had to pay interest to Cayer on these investments
- Resbalandia resented Cayer control and the fact that they were making money off of them
- The Sheepsian Islands became the symbol of their resentment
- Most Resbalandians continued to believe the Sheepsian Islands should be theirs

Resbalandia's Internal Situation

1970s
- The economy very bad
- People much poorer than they were before

1980s
- Unemployment and poverty getting so bad, the people blame the government for the economic problems (143% inflation rate, 13% unemployment)
- Resbalandia government knows its citizens will support its taking of the islands
- Resbalandian government feels this move would increase its popularity and power

Cayer's Internal Situation
- Declined from world's greatest military and economic power in the 1800s to a relatively weaker military position and a far weaker economic power in the 1900s
- Economy declined especially fast in global recession of 1980s
- Cayer's government knew that if it took back the island, it would bring back a momentary experience of Cayer's old glory



DAY THREE:

Where The Bombs Are

Objectives

To identify countries at war and those with nuclear weapons or having the potential of developing them
To allow students to express their feelings about the threat of nuclear war
To review the history of the arms race

Materials

Photocopies of student worksheets

Activities

A. Choose a few students to read their news articles aloud with their own resolutions. Tell students that the facts are based on the 1982 Falkland crisis. Tell them that Great Britain and Argentina actually went to war and Great Britain maintained control over the islands. Discuss students' resolutions:

- What led to your resolution?
- What details influenced your resolution?
- Compare the students' resolutions to the real resolution. How do they differ?
- Do you think the Falkland-Malvinas residents are content? Why?
- Do you think Argentina is content with the resolution? Explain.
- Do you think Great Britain is content with the resolution? Explain.
- What do you think will happen in the Falklands?

B. Point out that the two countries resolved their conflicts by war, the most extreme level of conflict. Hand out a map of the world (3a) and the categories worksheet (3b). Tell students to use the map to fill in the five categories on the worksheet. When they have finished, discuss:

- Did you know that there were so many countries at war?
- Why are so many countries at war?
- How do you feel about six countries having nuclear weapons?
- Why do so many countries have or will have nuclear weapons?
- How do you feel about many more countries having nuclear weapons in a few more years?
- Is world peace more likely since nuclear weapons have been developed?
- Do you feel more secure knowing these facts?

C. Write the *Haiku* style of poetry on the board (see Teacher Resource Sheet 3c). Describe it and how to write a Haiku poem. Ask students to write a Haiku about their feelings on nuclear war. Suggest that those who finish in time do a drawing next to their poem. Ask for volunteers to read their poems. Post the poems around the room.

D. Hand out the article on the arms race (3d). After reading the article, students should list in sequential order the events that led to the development of nuclear weapons (3e). Discuss:

- What is the future of the arms race?
- What effect do nuclear weapons have on our society? Why?

E. Homework: Give students copies of the interview questionnaire (3f). Ask students to interview two adults born before 1930 (who were fifteen or older when the atomic bomb was dropped on Hiroshima). Tell students to write down their responses.

Notes:

Symbols:

- ★ Countries at war
- ✱ Countries with nuclear weapons
- ✱ Countries believed capable of building nuclear weapons now
- ✱ Countries believed capable of having nuclear weapons in 6 years
- o Countries believed capable of having nuclear weapons in 7-10 years

26

FINLAND
UNION OF SOVIET SOCIALIST REPUBLICS
ASIA
LIECHTENSTEIN
POLAND
AUSTRIA
CZECHOSLOVAKIA
HUNGARY
ALBANIA
BULGARIA
TURKEY
GREECE
MALTA
CYPRUS
LEBANON
ISRAEL
IRAQ
IRAN
AFGHANISTAN
MONGOLIA
CHINA
NORTH KOREA
SOUTH KOREA
JAPAN
NEPAL
BHUTAN
BAHRAIN
QATAR
PAKISTAN
JORDAN
KUWAIT
SAUDI ARABIA
UNITED ARAB EMIRATES
INDIA
LIBYA
EGYPT
SUDAN
CHAD
OMAN
YEMEN
SOUTH YEMEN
DJIBOUTI
ETHIOPIA
SOMALIA
BANGLADESH
THAILAND
BURMA
LAOS
TAIWAN
VIETNAM
PHILIPPINES
CAMBODIA
MALAYSIA
SRI LANKA
MALDIVES
INDONESIA
PAPUA NEW GUINEA
Pacific Ocean
Indian Ocean
UGANDA
RWANDA
BURUNDI
KENYA
TANZANIA
ZAIRE
SEYCHELLES
MALAWI
COMOROS
ANGOLA
ZAMBIA
ZIMBABWE
NAMIBIA
BOTSWANA
MAURITIUS
MADAGASCAR
MOZAMBIQUE
SWAZILAND
SOUTH AFRICA
LESOTHO
AUSTRALIA
NEW ZEALAND

COUNTRIES AT WAR

Categories Sheet

Countries at war today	Countries with nuclear weapons today	Countries believed capable of building nuclear weapons now	Countries believed capable of having nuclear weapons in 6 years	Countries believed capable of having nuclear weapons in 7-10 years

HAIKU POEMS

Haiku are traditional Japanese poems, often inspired by the beauty of nature. They tell about something you see, feel, or think. They started in Japan, but people all over the world write them.

Haiku are easy to write. They have only three lines. The first line has five syllables, the second line seven, and the third line five. The first two lines each make independent statements and the third line makes a connection between the two.

Here are two examples of *Haiku*:

1) I am nobody
A red sinking autumn sun
Took my name away.
Richard Wright

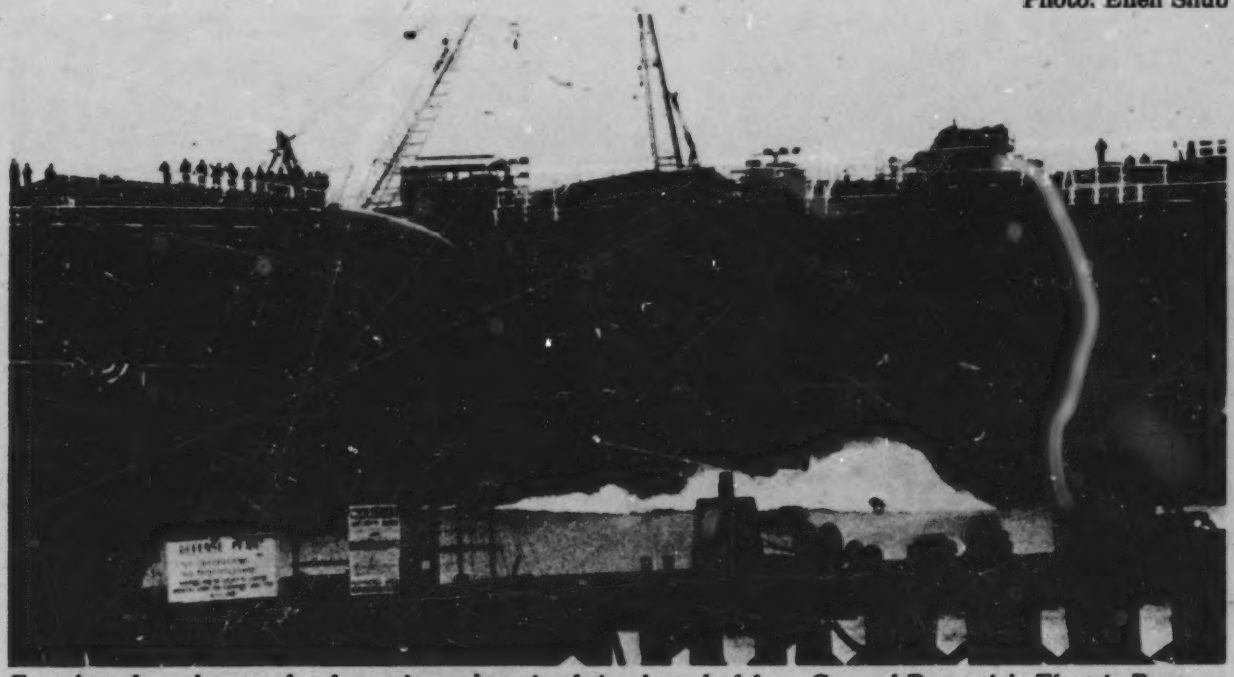
2) In the falling snow
A laughing boy holds out his palms
Until they are white.
Richard Wright

THE NUCLEAR ARMS RACE

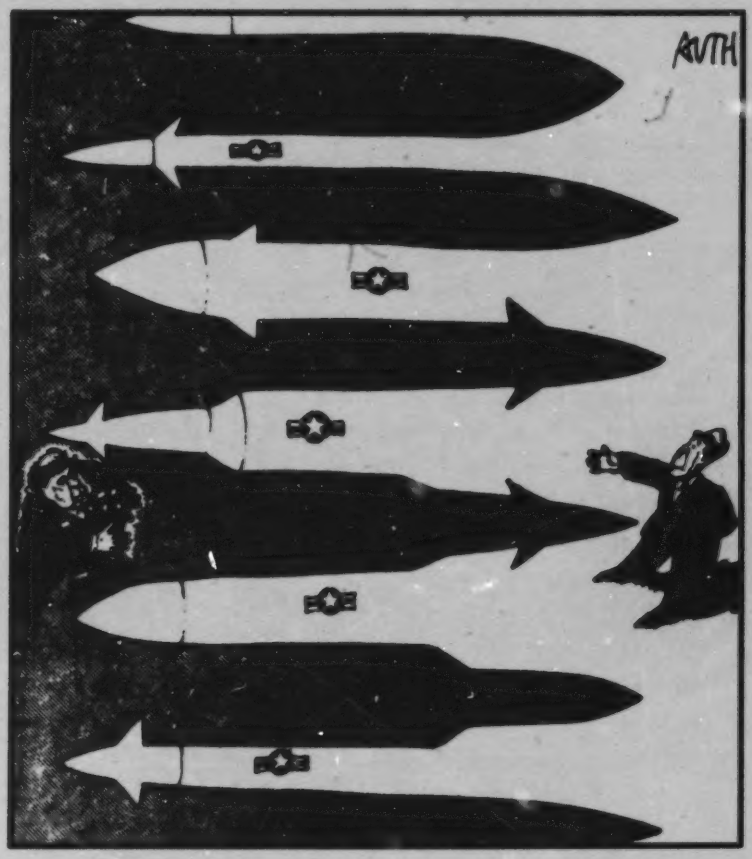
On August 2, 1939, at the urging of several scientists, physicist Albert Einstein signed a letter to President Roosevelt, alerting him to the feasibility of building an atomic bomb. As the father of atomic energy, Einstein was reluctant to sign the letter. The use of atomic energy for military purposes was a new, risky concept. But World War II had begun and the German scientists were rumored to be on the verge of developing their own atomic bomb, so Einstein succumbed to the will of his colleagues.

His letter reverberated throughout the hierarchy of the military. Less than six months later, an all-out push to build the bomb, approved by President Roosevelt, was announced at a secret meeting of the Manhattan Project (the code name for the A-bomb project.). The bomb was secretly designed and assembled by a group of American and European scientists at the Los Alamos Scientific Laboratory in New Mexico. By the spring of 1945, the first atomic bomb was ready for testing and possible use against Japan. To the surprise of President Roosevelt and then Vice-President Truman, seven of the prominent scientists who worked on the Manhattan Project published a report warning against an unannounced bomb attack on Japan. They said it would lead to an unprecedented arms race. The report was ignored, and after being tested in the deserts of New Mexico, the first atomic bomb was dropped on Hiroshima, Japan, on August 6, 1945. Three days later, on August 9, the United States dropped a second atomic bomb on another Japanese city, Nagasaki.

Photo: Ellen Shub



Fast-Attack nuclear warhead-carrying submarine being launched from General Dynamic's Electric Boat plant in Groton, Connecticut, April 25, 1981.



The decade 1949-1959 can be viewed as the true beginning of the arms race. In the fall of 1949, Russia developed and tested its first atomic bomb.

The United States was no longer the only country in the world to possess atomic weapons. The United States began testing its nuclear bombs over the Nevada desert, and in 10 years exploded 93 bombs in the atmosphere. The first fallout shelters were also built in this decade as part of the United States Civil Defense program. In 1952, Great Britain exploded its first atomic bomb. So, except for a brief period of respite in which first Russia and then the United States and Great Britain announced the suspension of all nuclear bomb testing, the arms race proceeded at terrifying speed.

In 1954, the United States placed nuclear weapons in "tactical" positions, a move duplicated three years later by the Soviets. This action-reaction cycle of the arms race continues to this day.

In 1960, both the United States and the Soviet Union each had fewer than 50 long-range strategic missiles. Also in 1960, France exploded its first atomic bomb. In 1961, the Soviet Union exploded its first 50-megaton bomb. Completely awed by the destructive power of this bomb, the Soviet Union proposed complete disarmament five months later in the spring of 1962.

But disarmament was never seriously considered. The Cuban missile

crisis of October 1962, was a dangerous confrontation between the United States and the Soviet Union. Russia had put nuclear missiles in Cuba, and President Kennedy ordered Premier Khrushchev to remove them or face a nuclear confrontation.

The Russians removed their missiles. One year later the two nations signed a "hot-line" agreement to maintain direct communication links between the leaders of the two countries. In the same year the Partial Test Ban Agreement was signed, limiting nuclear testing in the atmosphere. Then, in 1964, China exploded its first bomb.

In the 1960s, the United States deployed a fleet of submarines armed with nuclear missiles (SLBMs). By the end of the 1960s, the Soviets deployed a comparable submarine-based missile system.

Also in the 1960s, both sides deployed missiles in underground silos. By the end of the decade, the United States had thousands of strategic nuclear weapons. While the Soviet Union did not have as many, it was in the process of catching up.

In 1970, the United States began to deploy MIRVs (multiple independently targeted re-entry vehicles). Now, instead of one warhead per missile, each missile could carry many, each capable of finding a different target. Five years later the Soviets began deploying MIRVs of their own. In 1974, India developed its first nuclear bomb. In 1980, CBS news reported that Israel had detonated its first bomb the previous year off the coast of Africa with South African assistance.

President Jimmy Carter allowed the casings for the neutron bomb to be built for deployment in Europe. President Reagan was elected in 1980 on a strong pro-nuclear policy. Americans began to discuss the possibility of a "limited nuclear war." Caspar Weinberger, Reagan's Secretary of Defense, insisted that the MX missile system had to be built. Estimated costs were between $35 and $100 billion dollars.

The Pentagon maintains that 400 strategic missiles are more than enough to destroy the Soviet Union's economy and kill one third of its population. Yet, we have about 10,000 strategic warheads and 20,000 smaller atomic bombs (like the ones dropped on Hiroshima and Nagasaki). While it would also take about 400 Soviet missiles to destroy the United States, they have about as many strategic H-bombs as we have and about one half as many smaller atomic bombs as we have.

The 1980s have ushered in the greatest escalation of the nuclear arms race since the early 60s. Once again the United States is building a new generation of even more accurate nuclear weapons—Pershing, Cruise, and MX missiles. And not surprisingly, the Soviet Union is expected to respond in kind within a few years.

Will the arms race just go on and on and on? Can the arms race continue to go on and on and on?

Some Definitions

A-Bomb: a bomb with the force of 12,500 tons of TNT

Intercontinental Bomber: jet bomber designed for long-range travel

H-Bomb: a bomb with the force of 12,500,000 tons of TNT

ICBM: a land-based missile that carries nuclear warheads between continents with a range of 6,000 miles

SLBM: a nuclear-powered submarine that can fire long-range missiles from underwater

MRV: multiheaded missiles that could hit an increased number of targets

ABM: missiles designed to intercept and destroy attacking enemy missiles

MIRV: further development of MRV; can hit targets up to 100 miles apart

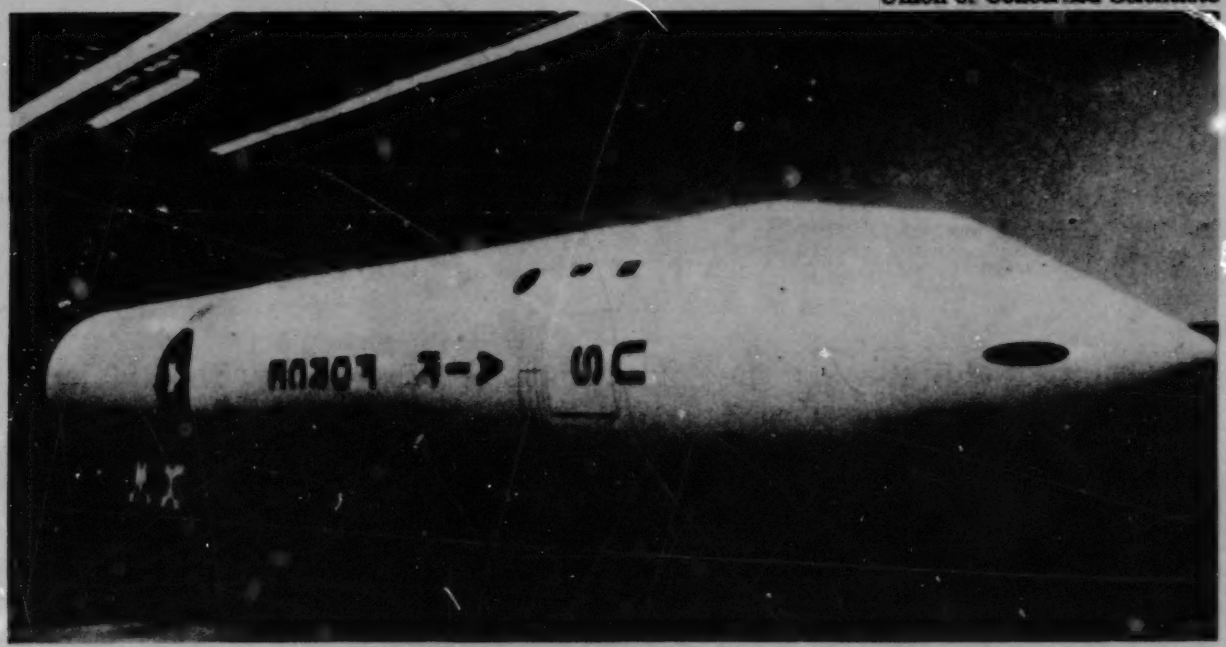
Cruise Missile: a small, highly accurate, low-trajectory missile that can fly under radar and can be launched from land, sea, or air

Neutron Bomb: bomb that releases tremendous amounts of radiation and relatively small amounts of heat and blast

Pershing Missile: intermediate-range ballistic missile capable of reaching targets within the Soviet Union in 6 to 10 minutes from Europe, demolishing large urban areas, and destroying Soviet missiles before they are fired.

MX Missile: the most accurate intercontinental ballistic missile, designed to destroy Soviet missiles in their silos within one-half hour; carries 5 hydrogen bombs, each of which can seek out a separate target.

Union of Concerned Scientists



A model of the MX being developed by the US Air Force, one of the latest nuclear warhead-carrying missiles.

SEQUENCING:

The Nuclear Arms Race

Rewrite the following statements in proper sequence as described in the article about the nuclear arms race.

1. The first MIRVs (multiple independently targeted re-entry vehicles) are deployed.

2. Both the United States and the Soviet Union deploy missiles in underground silos.

3. The A-bomb is dropped on Hiroshima. Three days later, another is dropped on Nagasaki.

4. The United States develops more accurate weapons like the Pershing, Cruise and MX missiles.

5. The Soviet Union proposes complete disarmament.

6. Great Britain explodes its first atomic bomb.

7. The Partial Test Ban Agreement, limiting nuclear testing in the atmosphere, is signed by the United States and the Soviet Union.

8. The Soviet Union deploys nuclear missiles in Cuba.

9. The United States and the Soviet Union both have fewer than 50 long-range strategic missiles.

10. The Manhattan Project is launched.

INTERVIEW QUESTIONNAIRE

1. How old were you when the first atomic bomb was dropped on Japan?

2. Were you in the military or a civilian?

3. Did you know the United States had the bomb?

4. Had you heard of atomic bombs before they were first used?

5. Did you know what the consequences of dropping an atomic bomb were before it was dropped?

6. How did you first hear about the bombing of Hiroshima and Nagasaki?

7. Do you think that dropping the bomb was the best way to end the war?

8. Were you aware of other alternatives?

9. What were you doing at the time Hiroshima and Nagasaki were bombed? (working, going to school, unemployed, etc.)

10. Did the bombing affect your life? If so, how?

11. Is it more dangerous to drop a bomb today than it was in 1945? Why?

12. Do you know more now than you did in 1945 about the effects of a nuclear bomb?

13. Have your feelings about dropping a bomb on an "enemy people" changed? If so, how?

14. Under what circumstances, if any, would you consider dropping a bomb on a civilian population?

Further comments?

DAY FOUR:

Dropping the Big One

Objectives

To examine the different accounts of the Hiroshima and Nagasaki bombings
To explore the possible effects of a nuclear explosion on the students' city
To allow students to express their thoughts and fears about a nuclear war
To learn about the atomic blast survivors who are now leading the movement for world peace

Materials

Photocopies of student worksheets
Copies of a map of the local area

Activities

A. Review homework. Ask a few students to read responses they received. Discuss:

- Were the people interviewed well informed about what had happened?
- Did most people understand the consequences of dropping the bomb? If not, how might this have affected their view about using the bomb?
- Did anyone's opinion change about dropping the bomb between then and now?

B. Hand out the drawing by an atomic bomb survivor from Hiroshima and Nagasaki (4a). Divide the class into small groups. Ask each group to list five to ten observations about what is happening in it. Ask each student to write a descriptive paragraph about the picture using the group's observations. Then, ask for two or three volunteers to read their stories to the class. (You may want to post their stories around the room and give students a chance to move about and read them.)

C. Read aloud to students the factual account of the Hiroshima bombing by John Hersey (Teacher Resource Sheet 4b). Write the words OBJECTIVE and SUBJECTIVE on the board. Ask students to define the differences between the two words.

> Objective: based on a factual account, uninfluenced by emotion or personal prejudice
> Subjective: based on a personal account, influenced by emotion or individual perceptions

Explain that Hersey was an observer and not a victim of the blast. His account is relatively objective, like that of a reporter. Next, read the account written by the artist of the drawing (Teacher Resource Sheet 4c). Explain that this is a personal or subjective description. Ask students to compare these two different styles of describing an event:

- Which description had the strongest effect on you?
- How does Hersey's description differ from that of the bomb victim?
- What details does Hersey describe?
- What details are described by the survivor?
- Is one style more informative than the other? Why or why not?
- If you wanted to tell someone about the bombing of Hiroshima, which story would you use—Hersey's or the survivor's? Why?

D. Hand out to students the sheet describing the effects of a one-megaton bomb (4d) and a map of their city or town (an example is provided on Worksheet 4e). Ask students to locate their own home or neighborhood on the map. Then, using the chart on Work-

sheet 4d, have students figure out what the effects would be in their neighborhood if a bomb hit the city center. Have them write a short account describing these effects using either an objective, factual style like Hersey's or a personal, subjective style like the blast survivors'. Encourage students to think very carefully about their own daily routine and include detailed examples of how it would change. After students have finished, discuss the feelings that the exercise aroused.

- Did this activity make nuclear war seem more realistic to you?
- How did this activity make you feel?

E. Ask students to think of one sentence they would like to say either *to* a Hiroshima survivor or *as* a Hiroshima survivor to the world. Go around the room quickly, being sure to include every student's statement.

F. Homework: Hand out to students the reading on the *hibakusha* (4f). *Hibakusha* (pronounced HE BAK' SHA) is the name given to survivors of the atomic blast in Hiroshima and Nagasaki. Students should read the *hibakusha* call for world peace and then answer the questions at the end.

Notes:

From *Hiroshima-Nagasaki: A Pictorial Record of Atomic Destruction* by the Hiroshima-Nagasaki Publishing Committee, Tokyo, Japan, 1978

HIROSHIMA ON THAT DAY

by John Hersey

The Flash 8:15

The A-bomb, which was nicknamed "Little Boy," was dropped from the B-29 Enola Gay. It exploded 570 meters above the ground with a light blue flash. The diameter of the fireball was 100 meters and the temperature at its center was 300,000° C. Soon after the explosion black and white smoke covered the city and rose thousands of meters high. The pressure from the blast directly under the center of the explosion was from 4.5 to 6.7 tons per square meter. Wooden houses within a radius of two kilometers of the hypocenter collapsed and completely burned from the wind and heat. The fires continued for two days. Some people who were near the center of the explosion literally evaporated and only their shadows remained; others were turned to charred corpses. Those who survived were badly burned. Usually their clothes were scorched and burned. They rushed to nearby fire prevention water boxes and river banks seeking water. Friends and relatives trapped under collapsed houses were crying for help. But flames surrounded them so closely they were about to burn.

Later, large black drops of rain poured down. It was a deadly rain which contained mud, ash, and other radioactive fallout. Through burning flames and pouring black rain there was an endless line of injured people heading for the outskirts of the city. The burns on their hands made their skin hang down. Their hands looked like those of ghosts.

"Give Me Water"

The security functions of the army, police, prefecture and city agencies practically ceased. Under such circumstances medical treatment was started by doctors and nurses who were injured themselves. Damage to nearby army posts was slight, so soldiers from them began the relief job. Hospitals soon became full, so public schools around the city were used as first-aid stations. They were also crowded by the rush of wounded persons. Countless dead bodies and seriously wounded people who barely breathed were left on the road or the river banks of the city. Medical supplies were used up immediately because of the unimaginable number of wounded persons. The untreated people took their last breath moaning, "Give me water." What is now called radiation sickness appeared. People began suffering from diarrhea as if they had dysentery, losing clumps of their hair, and developing purple colored spots on their skin which made them look like maps. . . . Even after careful investigation, the estimate of 240,000 casualties from the A-bomb is not considered a reliable estimate. . . .

From *Unforgettable Fire* by the Japanese Broadcasting Corp.

4c Teacher Resource Sheet

DESCRIPTION FOR PICTURE

(From Unforgettable Fire)

About 8:00 A.M., August 7, on the street in front of the former Hiroshima Broadcasting Station.

Since I was at school in Ujina, I had been exposed to radiation separately from my parents. The next morning at 7:30 I started from school towards the ruins of my house in Noboi-cho. I passed by Hijiyama. There were few people to be seen in the scorched fields. I saw for the first time a pile of burned bodies in a water tank by the entrance to the broadcasting station. Then I was suddenly frightened by a terrible sight on the street 40 to 50 meters from Shukkien Garden. There was a charred body of a woman standing frozen in a running position with one leg lifted and her baby tightly clutched in her arms. Who on earth could she be? This cruel sight remains vividly in my mind.

From *Unforgettable Fire* by the Japanese Broadcasting Corp.

THE EFFECTS OF A ONE-MEGATON BOMB

Most of the nuclear bombs that the Soviet Union and United States have are from one-megaton to 20-megaton capacity. A one-megaton bomb is approximately 100 times the force of the atom bombs dropped on Hiroshima and Nagasaki by the United States during World War II. And many of each country's nuclear missiles contain multiple warheads, meaning that one missile contains 2 to 25 one-megaton bombs.

What do you think would happen if just one one-megaton bomb dropped on your city or town? (Actually, in a limited nuclear attack, a multiple warhead missile would be used.) Use the figures below (and a compass) to chart on your maps the effects of a one-megaton bomb to the region surrounding your city or town. Draw each circumference area and label it.

0-2 miles	Total destruction Winds 400 miles per hour 99% dead A crater ¼ mile in diameter and 20 stories deep
2-3 miles	50% dead from the explosion 25% dead later from injuries and burns 20% injured or victims of 2nd- and 3rd-degree burns Most buildings flattened Winds 180 miles per hour
3-5 miles	50% killed or injured Winds 150 miles per hour Most buildings flattened
5-10 miles	25% dead from injuries or burns Winds 100 miles per hour Most buildings damaged Anyone in the open would receive at least 2nd-degree burns
1-10 miles	If started, firestorms could kill thousands more either directly or by consuming all oxygen so people suffocate Lethal radiation is spread throughout the area (lethal radiation is defined as radiation levels capable of killing half of all young, able-bodied adults, those best able to withstand doses of radiation)
10-100 miles	Under average weather conditions, this entire area would be lethally contaminated

Statistics compiled from the Office of Technology Assessment

New Hampshire
NASHUA
HAVERHILL
METHUEN
LAWRENCE
LOWELL
GLOUCESTER
DANVERS
BEVERLY
SALEM
PEABODY
BURLINGTON
WAKEFIELD
WOBURN
MELROSE
SAUGUS
LYNN
MALDEN
REVERE
MEDFORD
EVERETT
LEXINGTON
ARLINGTON
WALTHAM
SOMERVILLE
BELMONT
CAMBRIDGE
WATERTOWN
CHELSEA
BOSTON
Massachusetts Bay
Atlantic Ocean
FITCHBURG
LEOMINSTER
MARLBORO
NEWTON
BROOKLINE
WELLESLEY
NATICK
FRAMINGHAM
NEEDHAM
DEDHAM
MILTON
QUINCY
BRAINTREE
WEYMOUTH
RANDOLPH
WORCESTER
NORWOOD
BROCKTON
PLYMOUTH
Cape Cod Bay
WOONSOCKET
Connecticut
Rhode Island
ATTLEBORO
TAUNTON
PAWTUCKET
PROVIDENCE
CRANSTON
FALL RIVER
WARWICK
NEW BEDFORD
SCALE: 0 5 10 MILES

HIBAKUSHA: THE SURVIVORS

Hibakusha is the name given those people who survived the atomic blasts in Hiroshima and Nagasaki. Today, there are 366,523 men and women registered in Japan as survivors. After the war, the struggle of each of these people began. It was a struggle against acute radiation-induced diseases, against poverty and against the loss of home and relatives. They ask, "What have you done so that humanity may live at peace?"

The *hibakusha* have led the struggle for world peace. In response to their call for a World Disarmament Conference, there have been two United Nations Special Sessions on Disarmament (in 1978 and in 1982). Below is the call issued by the *hibakusha* to the world:

Life or Oblivion: A Call from the Hibakusha of Hiroshima & Nagasaki to the Hibakusha of the World

Men and women, young people and children of all the world, Unite! We have nothing to lose but the chains which bind us to ever-increasing armaments. Unless we can break these chains we may lose our jobs, our homes, our schools, our playgrounds, our lives, our culture, our civilizations, our world.

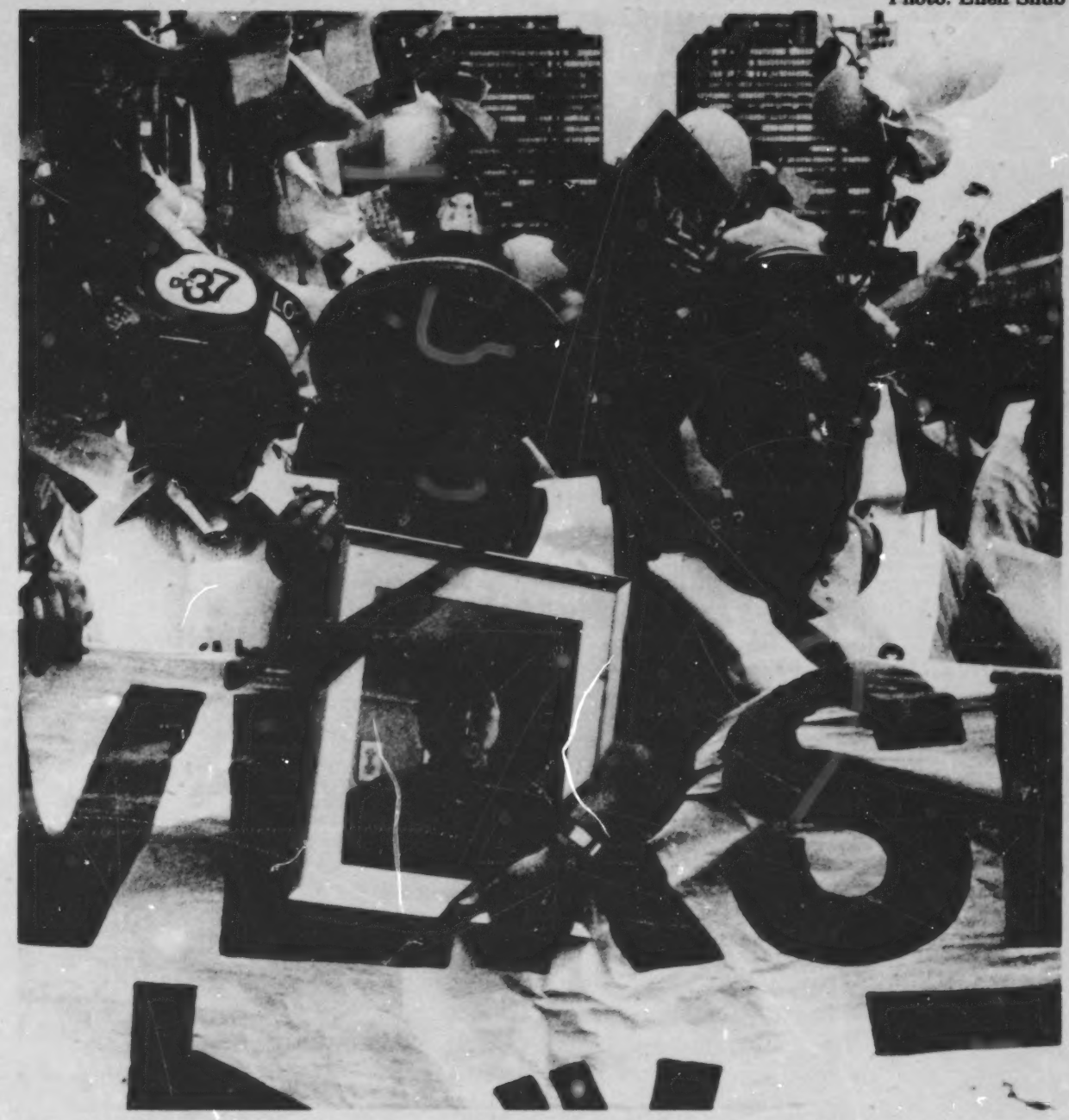
We are all survivors of the Hiroshima and Nagasaki Bombs. We also are Hibakusha, as the survivors of those tragedies call themselves. Although we did not experience the blast and the burns, we all carry in our bodies man-made radioactivity which would not be there but for those and the other explosions which have followed since. Those bombs killed more than 200,000 women, men, young people, children, babies, as well as animals, birds, fish—every form of life, even many of those gallant and desperate people who came into the cities afterwards looking for relatives or to give help.

We survived those bombs, but we are threatened now by a hundred thousand bombs more powerful than those which destroyed Hiroshima and Nagasaki in 1945, and by the prospect of neutron bombs, cruise missiles and the deployment of more accurate strategic weapons.

Not only pacifists and idealists warn of these mortal dangers, but leaders of nations, Presidents and Prime Ministers, Ministers of defense and military men. Much more important is the solemn warning from scientists, some of whom helped to create the bombs and the missile systems, that we are in danger of destroying the civilizations, if not human life itself. If these weapons are ever extensively used—and scientists warn that there is increasing probability they will be unless we reverse the present trends—the Earth will become as barren and sterile as the moon.

Hibakusha of the world, we were born free, but everywhere we are slaves to these monstrous preparations for a Third World War, which have now reached a stage of complete irrationality.

Photo: Ellen Shub



Japanese delegation of Hiroshima survivors holding banner proclaiming Reverse the Arms Race at June 12, 1982 New York City Rally for peace and disarmament.

Militarists say that peaceful co-existence is an empty dream and that armaments are essential for the security and greatness of all nations. They call themselves the realists of the world who face the harsh facts of life.

But they are the prophets of disillusion. The armaments they manufacture not only rob us of our true national and cultural heritage, wherever we live, but they create the very insecurity they are supposed to dispel. They cause poverty, inflation and social injustice everywhere. If we

end the Arms Race we can rebuild decaying cities, and provide the homes, the works, the schools, the hospitals which every nation needs. We can wipe out preventable disease. We can teach all to read and write, and make life happy and noble for people everywhere.

If the human voices of the people will speak now, if by the milion and the hundred million they will cry "an end to armaments and all the evil that comes with them. Let us give the resources of the world to human happiness and welfare, not to death and destruction."

The lessons of Hiroshima and Nagasaki can save us if we are willing to learn them. But the time is short and we must act now.

Hibakusha of the world unite. We are the people of a glorious future.

Aug. 2, 1977, Hiroshima

1. Who are the *hibakusha*?
2. Why do they say that we are all *hibakusha*?
3. What do the *hibakusha* ask the world to do?
4. What is one thing that *you* could do to promote world peace? In answering this, try to be specific. Consider the following questions:

- Who could you contact?
- Is this action most effective if done by a single person or by a group? If by a group how could this group be formed?
- Would this action require money? If so, how much?
- How long would it take to get results?

DAY FIVE:
Limited Nuclear War

Objectives
To discuss ways of deterring nuclear war
To explore different viewpoints about the possibility of surviving a "limited" nuclear war

Materials
Photocopies of student worksheets

Activities
A. Review homework: Ask students to define the word *hibakusha*. What message did the *hibakusha* have for the world? Ask for a few volunteers to share their ideas for their own contribution to world peace. Discuss each idea, referring to the questions in the homework.

B. Hand out to students copies of the article "N-War the End?" (5a) and some writing paper. Tell students to title their paper "Could We Survive A Nuclear War?" and to draw a line down the middle of their paper. On the top of one side write YES and on the top of the other side write NO. As students read the article, they should make a list of the arguments on each side of the debate. Students should also include the source of the argument, that is, the name of the person making the statement and his affiliation. Explain that this is an important part of documentation; if someone challenges your facts you can refer them to the original source. Also, an argument is considered more convincing when presented by someone with recognized knowledge or experience.

C. When students have finished sorting out the two sides of the argument, divide the class in half (or in fourths if it is a large class) and assign one side of the debate to each group. Give them ten minutes to consolidate their points from the article, develop an opening statement for debate and prepare counter-arguments. Have each group pick two presenters (one if there are four groups). Allow each side to make a two-minute presentation. Then open the debate to counter-arguments and questions from the rest of the class. Explain to students that they should listen to the debate as neutral observers. This will give them an opportunity to ask their own questions of the debate panel. At the end of the debate, ask students to vote for the side that they found most convincing. Discuss the debate:

- What were the deciding factors in your vote?
- Did the evidence presented in the debate change your original opinion on the issue?
- How can "experts" in the same field disagree on an issue?
- Which "expert" did you find more convincing? What made his argument more convincing than others?
- Does this affect your view of "experts?" If so, how.

D. Homework: Ask students to find out what the phrase "duck and cover" means. Don't give them any hints except that it relates to the issues being studied in class. "Duck and cover" was the slogan of the U.S. Civil Defense Agency in the late 1950s and early 1960s. They advised U.S. citizens, in the case of nuclear attack, to "duck and cover." There was a massive advertising campaign that included a jingle and a talking turtle to inform people of the U.S. civil defense plan.

Optional: In Activity C, you may want to conduct a formal debate. If so, give students some additional time to research the issue. You should also pick a panel of judges to decide the winner of the debate.

There is an excellent short story by Stephen Vincent Benet entitled "By the Waters of Babylon." It is about a young boy who wanders into the forbidden "Dead Places, Place of the Gods." He finds the remnants of a civilization so advanced that it created its own destruction. You may want to include this reading as homework.

Notes:

5a

N-war the end? 'No,' say some US officials

By Robert Scheer
Los Angeles Times

LOS ANGELES – As tension increases between the superpowers, a macabre question is becoming central to a growing national debate over the implications of the nuclear arms race: Can the United States survive a nuclear war with the Soviet Union?

There seems to be an inclination, at least within the Reagan Administration, to look upon nuclear conflict as something less than a terminal holocaust (or the biblical prediction for Armageddon).

Statements about attaining a nuclear war-fighting capability, limited nuclear war, the development of tactical nuclear weapons and an increased emphasis on civil defense all assume that "nuclear war-fighting," as it has come to be known, is compatible with the continuance, after a brief and manageable interruption, of civilization more or less as we know it.

T.K. Jones, deputy undersecretary of defense for strategic and nuclear forces, said that with proper civil defense, it would take only two to four years for the United States to fully recover from an all-out nuclear war with the Soviet Union.

The Federal Emergency Management Agency (FEMA), which is in charge of the US civil defense program that the Reagan Administration plans to expand, has declared that "the United States could survive nuclear attack and go on to recovery within a relatively few years."

In columns and commentaries prepared for publication in local newspapers, the agency has argued that "Americans would not be helpless ... they could meet and overcome all the challenges of the post-attack environment" by taking such protective measures as evacuation of urban populations, survival training and the construction of simple fallout shelters.

William Chipman, chief of FEMA's civil defense division, likens what his agency calls post-attack recovery to the problems encountered in other major but survivable historical disasters.

He concedes that "there would be a succession of problems, a succession of hurdles to be surmounted." But then he pointed to a fatalities chart showing that most people would pull through. "When they figure fatalities, they figure it on the basis of your Crimean War medical care, which is to say, almost none," he observed on the chart's methodology.

"And yet, if I remember rightly, of the people who reached the so-called hospitals of the Crimea – they were more or less like sheds – I think 85 percent ... eventually survived, essentially unaided, essentially pre-arrival of Ms. Nightingale."

His comments were directed at the increasing number of doctors who have organized in groups, such as Physicians for Social Responsibility, to call attention to the implications of nuclear war. Chipman took particular umbrage over testimony by Dr. Howard Hiatt, dean of the Harvard School of Public Health.

Hiatt told a Senate committee last year: "Recent talk by public figures about winning or even surviving a nuclear war must reflect a widespread failure to appreciate a medical reality. Any nuclear war would inevitably cause death, disease and suffering of epidemic proportions, and effective medical intervention on any realistic scale would be impossible."

Hiatt, who met recently with President Reagan as one of a group of emissaries from Pope John Paul II concerned about the possibility of nuclear warfare, noted in his Senate testimony that, after the Aug. 6, 1945, bombing of Hiroshima, most of the doctors in the city were killed or seriously wounded. Only six doctors were available to treat the 10,000 wounded who made their way to Hiroshima's 600-bed Red Cross hospital, Hiatt said.

There was, eventually, outside help for Hiroshima's wounded, which Hiatt argued would not be forthcoming in an all-out nuclear attack on the United States. Furthermore, he said, the size of the bombs dropped would be several hundred times larger.

Hiatt cited an Arms Control and Disarmament Agency study that postulated a one-megaton attack on the city of Washington. The result would be that of the area's 2.5 million inhabitants, more than 600,000 would be killed and 800,000 injured. Hiatt said he doubted there would be the one-week notice to evacuate the population on which Chipman and other civil defense officials base their projections. And because medical facilities and supplies are concentrated in the urban area, the surviving population would not be treated.

"Can the seriously injured be treated at George Washington University Hospital?," Hiatt asked, somewhat rhetorically. "It no longer exists. Georgetown University Hospital? It, too, has been destroyed. In ruins, as well, are Howard University Hospital, D.C. General, Capital Hospital and several others."

The emergency management agency has conceded in one pamphlet that "a large-scale nuclear attack on the United States would cause great numbers of casualties, and there would be fewer doctors, nurses and hospitals available to care for them. Even in areas where no nuclear weapons exploded, radioactive fallout could prevent doctors and nurses from reaching injured or sick persons for a considerable period of time."

But the answer, the agency said, is that "people would have to help each other during the emergency" by depending upon their own knowledge of first aid.

The agency has also urged both adults and teenagers to acquire these valuable skills by taking free courses that are offered in many communities such as Red Cross first aid courses.

Further detail has been provided in another agency publication, which offers a seven-point plan for dealing with burn victims. It suggested giving the patient water and covering the burned area with dry gauze.

Because burn victims will be numerous, Hiatt does not find the agency manual's suggested care adequate.

"Let me cite one reason for my pessimism by describing the case of a 20-year-old man who was hospitalized last week in the burn unit of Boston's Massachusetts General Hospital," he said. "In the first eight days of hospitalization, this patient needed 102 units of fresh frozen plasma, 42 units of fresh-frozen red blood cells and 12 units of platelets to compensate for losses from the burned areas. He had two four-hour operations, each requiring four surgeons, two anesthetists and several nurses. He was on a respirator constantly and required highly specialized nursing care around the clock. Many professionals and technicians in other hospital departments were constantly called upon."

Hiatt quoted the head of the burn unit as saying that "just to keep one such patient alive taxes us." Hiatt added, "No amount of preparation could provide the human and physical resources required for the care of even a few such patients hospitalized simultaneously in any city of the nation. Yet one must assume that at least tens of thousands of such casualties would result in every metropolitan center hit by a nuclear weapon."

Mass deaths also would present hazards to the survivors. Physicians argue that pestilence, for example, would be a problem even if tens of millions should manage to survive the effects of the initial blast, fire and radiation.

Dr. Herbert L. Abrams of the Harvard Medical School suggested in a report last month to the American Association for the Advancement of Science that "insects, many of which have an unexplained immunity to radiation, would thrive on the unburied corpses, infest surviving animals, and, eventually, man."

He predicted the resurgence of diseases such as the plague, cholera, smallpox and typhoid, not to mention a huge increase in influenza, pneumonia, meningitis and hepatitis.

The emergency management agency takes the opposite position. A pamphlet supplied by Chipman assures readers that "the specter of pestilence and disease stalking the land in the aftermath of nuclear war is probably just that – a specter, not a realistic probability. It need not, and probably would not, occur."

The agency's position is that the major scourge diseases have been eradicated and cannot return. Because knowledge of sanitation and vaccines is widespread, the agency assumes that the survivors would be able to employ this to good advantage.

From the *Boston Globe*, January 18, 1982

BEST COPY AVAILABLE

DAY SIX:

Duck, Duck, and Cover

Objectives

To compare the purpose of Civil Defense in the 1950s and 1980s
To understand that people perceive facts and issues differently
To explore students' attitudes about the Soviet Union

Materials

Photocopies of student worksheets

Activities

A. Review homework. Ask students to crouch under their desks and put their hands over their heads. Ask them if they think this would protect them if a bomb were dropped over their city. Then write "Duck and Cover" on the board. Ask who learned its meaning. Discuss their answers. Tell them what it means if they were unable to find out for themselves (see Day Five, Note D).

Ask students to think of survival items they would need in a fallout shelter. Before they start, remind them to think about how long they might have to stay in their shelters. The Civil Defense Agency has recommended:

canned goods	sleeping bag	radio	sterno oven	plastic bags
flashlight	water jug	utensils	buckets	shovels

B. Hand out the Boston Globe article, "If N-War Threatens, Hubbub is Ready" (6a). After students have read it, discuss the following questions. Some have been answered by the Massachusetts Civil Defense Agency. We have included two samples of questions and answers from the Massachusetts Civil Defense booklet "Crisis Relocation Planning . . ." (Teacher Resource Sheet 6b). These are examples of official responses to questions about civil defense.

- Do you think this is an effective plan? Why or why not?
- How long do you think it would take to evacuate the city?
- How do you think cities and states will pay for this plan?
- The state's Civil Defense planning director says that, "For the survivors, of course life wouldn't be as we know it now, with a car in the garage." What do you think life would be like? Would you like to be a survivor?
- How would people in the country respond to people coming from the city?
- Why have some people spent so much money on building shelters?
- Is an international crisis of such unprecedented severity likely?
- How many people would survive if crisis relocation plans were executed nationwide?
- How can anyone be sure the time needed—up to three days—would be available?
- What if the time needed isn't available?
- How serious is the hazard from radiation?
- How does the Civil Defense Plan of the 1980s compare to that of the 1950s?

C. Show the picture of the Peter-Paul Goblet to the class (Teacher Resource Sheet 6c). Ask students to look at it quickly and then write down what they see. Once they have finished writing, they should share their observations with the rest of the class. The purpose of the exercise is to show how people have different perceptions. Although the students are all viewing the same picture, they will describe different images. Those who look at the black area will see twin faces. Those who look at the white area, will see a

goblet. It depends upon how they look at it.

Then show the picture of the woman to the class (Teacher Resource Sheet 6c). Give the students the same instructions. When they have finished writing their observations, discuss what they see. Some will see a young woman and others will see an old woman with a prominent chin. Here are some clues:

1) The young woman's ear is the old woman's eye.
2) The young woman's neck is the old woman's mouth.

Discuss:

- Why do people see different images?
- Does this apply to other things in the world? Give an example.

D. Read the following aloud:

1) The Soviets are out to conquer the world.
2) The Soviets want peace as much as we do.

Put the two phrases up on either side of the room. Then ask the students to stand in front of the phrase they believe. Each group should write down at least five reasons why they believe their phrase. They should choose a spokesperson to represent them. Discuss the two different beliefs.

- Why do people have differing perceptions of the Soviets?
- How does this relate to the previous activity?

E. Hand out the songs concerning feelings about the threat of nuclear war (6d). Peoples' attitudes are often expressed through their culture—songs, poetry, paintings, etc. Here are two examples of popular songs that were written after the bombs were dropped on Hiroshima and Nagasaki. Ask students to study the words and summarize the main idea in their own words. Discuss:

- Why do you think the writer composed this song?
- What different things could this song mean?

F. Homework: Ask students to find two articles on the same subject in two diferent newspapers. Look in a major daily like the *New York Times* or in a community newspaper if your town does not have two widely circulated papers. Ask students to compare the two articles and explain how the situation written about was perceived differently in the two articles.

Optional: The following activity is another example of how people perceive things differently.

Stage an incident in class and ask the students what their perception of the incident was. For instance, arrange to have someone come in and steal something off the teacher's desk, or come in, yell at the teacher and run out. Ask the students to describe the person physically (what did she or he wear, what did she or he look like), what did she or he say, when did it happen, where did she or he go afterwards, was anything stolen, etc. Students will give different versions of this same incident.

If N-war threatens, 'Hubbub' is ready

By Irene Sege
Special to The Globe

It's known as "Hubbub" and it would put nearly 500,000 cars on the roads leading out of metropolitan Boston, sending Cambridge residents, for example, to Greenfield, and moving Somerville's to Maine and Quincy's to Cape Cod.

It would have families in every Greater Boston community from Essex to Easton relocate to western Massachusetts or the Cape or Maine or New Hampshire.

And it would put the governor and his top staff in the control room of an underground bunker beneath a Framingham parking lot where they would monitor the relocation of 4.5 million Massachusetts residents, including 2.1 million from the Boston area.

"Hubbub" is not fanciful science fiction. It's the nickname given the state's Civil Defense plan for coping with the mass evacuation of metropolitan Boston on the eve of nuclear war.

Under preliminary plans completed this year, residents of 202 Bay State communities located in the vicinity of strategic military bases, in populous areas with more than 50,000 people or near key industry would be evacuated to small towns throughout the region. In addition, 400,000 Connecticut residents would flee to western Massachusetts, 150,000 from Rhode Island would go to the Cape and two million others from their neighboring states would drive through Massachusetts on their way to northern New England.

All in all, Massachusetts would be more successful, proportionately, than any state in the country, according to the Massachusetts Civil Defense Agency.

Some communities would see their populations more than quintuple. The Cape's population, for instance, would jump from 147,925 to 441,100, with towns such as Falmouth and Orleans playing hosts to more than five times their normal residents.

The plans, in the works since 1977, have generated a dispute in which local officials, policy analysts and citizens sharply disagree about whether evacuation is a practical step in the face of an impending nuclear attack. Supporters, both locally and nationally, point to lives saved by relocation, while critics question the whole idea of surviving nuclear war and brand mass evacuation as a prescription for chaos.

The scenario that would put the plan into action goes like this: During a period of increasing international tensions, state Civil Defense agencies distribute evacuation instructions. Relations continue to deteriorate and the Soviet Union orders its cities evacuated, spurring the President of the United States to order massive relocation here.

But at the present level of funding – $128.8 million nationwide for fiscal 1982 – the nuts and bolts planning for such things as traffic, food and housing will not be complete until the late 1990s, says Russell Clanahan, a spokesman for the Federal Emergency Management Agency. However, officials in the agency don't yet know how President Ronald Reagan's reference on Oct. 3 to plans to "devote greater resources to improving our civil defenses" will affect this timetable.

Authorities estimate relocation would limit casualties to 10-20 percent of the population, compared to 80-90 percent without evacuation. Says Douglas Forbes, the state's Civil Defense planning director, "That's still an incredible catastrophe, more horrible than anything we've faced. But we could survive and we could recover. Of course life wouldn't be as we know it now, with a car in the garage."

But critic George Kistiakowsky, chairman of the Council for a Livable World and a Harvard professor emeritus, says the accumulation of arms means there's no refuge from nuclear war. "To me, these people fell asleep 20 years ago when there were few warheads, and have been asleep ever since," he says.

And while Dr. Jennifer Link, a board member of Physicians for Social Responsibility, concedes that evacuation could save lives in the short run, she quickly adds: "Those additional survivors are going to be in a marginal state of existence. They may well die within a year from radiation sickness. Death from radiation sickness may be matched by death by famine and disease."

In Massachusetts, a handful of communities have spoken out against the plan. The most vociferous opposition has come from Cambridge, where one city council member termed the plan a "comic book" scheme to send residents to Greenfield.

The council voted in March to call for nuclear disarmament and last month published a pamphlet outlining the horrors of atomic war. City Councilman David Wylie, sponsor of the move, says he's received few complaints about the brochure. But state planner Forbes says he's getting one or two calls a day from Cambridge residents who want to know what to do if nuclear war threatens.

Elsewhere, selectmen in Sherborne, Buckland and Bernardston informed the state this summer that they would not agree to put up 22,200 evacuees in their towns – tiny dots on the map of western Massachusetts. Forbes says, however, that officials from the three towns will soon be briefed on a state law requiring communities to take in evacuees.

The preliminary plans have also drawn fire for evacuating people to the vicinity of strategic targets that the government considers more likely to be hit than Otis.

Says William Arkin, a research associate at the nonprofit Institute for Policy Studies in Washington, "It makes no sense to move people from a noncritical area to a point on a map that could be a critical target in a nuclear war. . . . It's just pie-in-the-sky imagination."

But Civil Defense officials say their plans were made to cope with an all-out war in which both civilian and military targets would be hit. In that case, they say, military targets such as Otis would probably be hit with a small bomb while metropolitan areas such as Greater Boston would be bombarded with many larger weapons, meaning that fallout and blast effects would be less in Barnstable and Falmouth than in suburban Boston. Forbes says "we're not putting people in a situation that's not survivable."

If war looms here, according to Forbes, evacuees will be housed in makeshift fallout shelters in the basements of public buildings, one person for every 20 square feet of space.

Those with private cars would drive to their assigned destinations. To aid police directing traffic, each car would have a sticker showing the abbreviated name of the host community on the front and route instructions on the back.

GLOBE MAP BY DEBORAH PERUGI

Planes and trains would transport the carless. Even the New Bedford fishing fleet would be used in the evacuation, carrying 10,000 people to Yarmouth.

The relocation, say Civil Defense officials, would be completed within three days, about half the time it would take the Soviets to implement their relocation. Supporters and critics agree evacuation would be useless in a surprise attack.

Proponents also see evacuation as a way of buying time if international relations teeter on the brink of war. According to a scenario used in state-sponsored Civil Defense workshops, the mere movement of people brings Soviet and American leaders to the negotiating table.

Opponents, however, say the crisis relocation plans increase the likelihood of nuclear war by promoting the idea that atomic confrontation is survivable. And, if the United States evacuates its cities first, they say, the relocation could push the Soviets to a preemptive first strike.

For now, the Federal Emergency Management Agency has directed state Civil Defense agencies to concentrate on making the first detailed plans for those communities near air bases that are high-risk targets because of their ability to launch counterattacks.

Two Massachusetts Air Force bases – Otis and Chicopee's Westover – are on the list. Neither now houses bombers, but both have runways that could quickly be called into service. And Otis is home of the PAVE PAWS early warning system that detects missiles launched from submarines in the Atlantic Ocean. State Civil Defense officials expect to complete "prerisk evacuation plans for these areas within a year."

CRISIS RELOCATION PLANNING...

Questions and Answers by Massachusetts Civil Defense Agency

Q. *Is an international crisis of such unprecedented severity likely?*

A. No, such a crisis is not thought to be likely, and naturally everyone hopes that such a crisis will never arise. In this connection, attention is called to a quote from the January 1980 Annual Report of the Secretary of Defense to the Congress:

> "At present, there are excellent grounds for confidence in the U.S. strategic deterrent. Our alert bombers, SLBMS on patrol, and a number of our ICBMS could be expected to survive even a well-executed Soviet surprise attack. Several thousands of warheads could be launched in comprehensive retaliation, and most of the bombers and missiles should be able to penetrate to their targets...
>
> "The Soviets, at the present time, would have a somewhat comparable capability.
>
> "Because of this Soviet capability...we have a situation of essential equivalence. It can also be said with some confidence that a state of mutual strategic deterrence is currently in effect. It follows that nuclear stability would probably prevail in a crisis as well."

Of course, a crisis is not impossible, as suggested by the excerpts below from the January 1980 report to the Congress by General David C. Jones, Chairman of the Joint Chiefs of Staff:

> The SALT II hearings "...dramatically illuminated the facts of the deteriorating strategic balance that will continue into the latter part of the 1980s...
>
> "I anticipate such a disparity would be reflected in a more confident Soviet leadership, increasingly inclined toward more adventurous behavior...The Soviet invasion of Afghanistan could well be a 'leading edge' event reflecting precisely such a heightened confidence. Such a situation carries the seeds of serious miscalculation and runs the risk of precipitating a serious confrontation which neither side wants nor intends.
>
> "In summary, we face a period of high risk and great uncertainty in the strategic balance throughout most of the coming decade.
>
> "...The world is in many ways different and more threatening than a year ago, and all the signs point to even greater risks as the days pass."
>
> In view of the potentials for instability in the Mideast, "A crisis could result at any time which could curtail access to the oil that is required by the United States and its allies.
>
> "To complement their strategic offensive posture, the Soviets maintain large strategic defense forces and an extensive civil defense program...compared to the Soviet counterpart, the U.S. civil defense program is funded at a very low level and relatively ineffective."

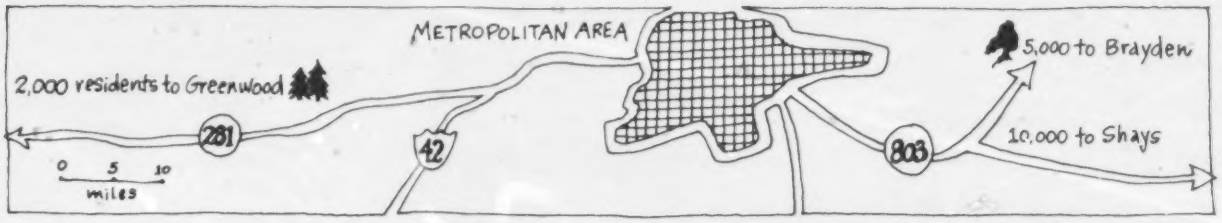
It seems fair to say that no one can predict the future with certainty, or guarantee that an international crisis will never occur. Wouldn't it be best to have made some preparations to protect our population should a severe crisis indeed occur, however unlikely this may be?

Q. *How many people would survive if crisis relocation plans were executed nationwide?*

A. The Department of Defense study suggested that in an all-out mid-1980s attack on both military and urban-industrial targets, a complete lack of civil defense could result in a national survival rate of perhaps 20 percent while the shelter program alone could increase the survival rate by 30 percent. By contrast, a reasonably effective crisis relocation program could result in total survival of 80-90 percent of the population. A much more expensive in-place blast shelter system could yield a survival rate of over 90 percent.

The differences between crisis relocation and blast shelter systems have to do with costs, with the time required to place the population under protection after warning, and with the uncertainties associated with each of these systems. A blast shelter system could protect urban residents with only minutes of warning, but could cost over $70 billion. A crisis evacuation system would cost much less and could perform nearly as well—provided, however, that three days or more needed to execute evacuation plans and develop fallout protection for evacuees was available; a timely decision was made to activate the plans; people generally cooperated in the evacuation movement; and other operations connected with Crisis Relocation Plans worked effectively (for example, crisis actions to develop fallout protection for evacuees in host areas). Thus, the crisis evacuation system is much less expensive than the in-place blast shelter system but has more uncertainties associated with it.

In short, the only moderate-cost civil defense approach which has potential for high survival is based on crisis relocation. The study also examined issues of feasibility and credibility and concluded that a moderate civil defense program is acceptable and credible to most Americans.



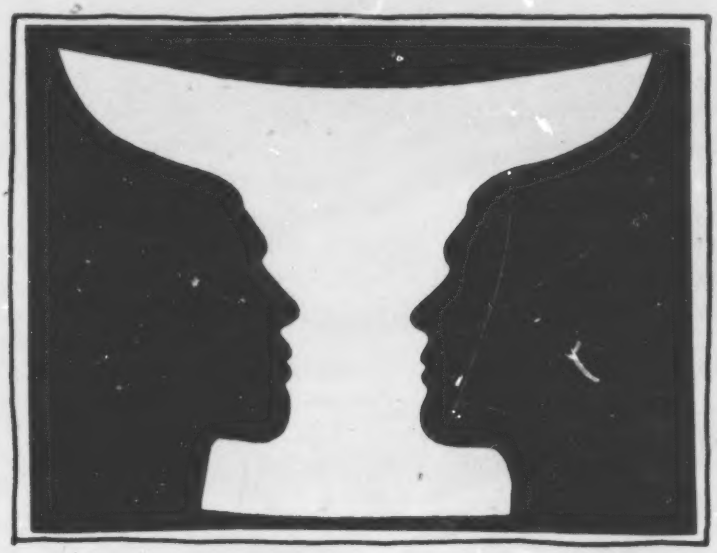
Q. *How can anyone be sure the time needed—up to three days—will be available?*

A. Very clearly, no one is in a position to provide an iron-clad guarantee that this kind of time would be available. But it is the judgment of the Department of Defense that if the U.S. should ever suffer a nuclear attack, it is much more likely that this would follow a period of intense international tension than occur abruptly.

There are grounds for this judgment. The July 1978 CIA report on Soviet civil defense states that "The critical decision to be made by the Soviet leaders in terms of sparing the population would be whether or not to evacuate cities," and it points out that evacuation of cities in the U.S.S.R. could reduce casualties by some 100 million. The report also estimated that "a week or so" could be required to evacuate Soviet urban areas and to develop fallout protection for the evacuees.

Thus, should the Soviets start evacuating their cities, this could provide time for the U.S. to implement its own relocation plans, provided that the necessary plans and supporting capabilities had been developed.

From *Crisis Relocation Planning... Questions and Answers* by the Massachusetts Civil Defense, 400 Worcester Rd., P.O. Box 1496, Framingham, MA 01701



POPULAR SONGS

"Old Man Atom" by The Sons of the Pioneers. Recorded about 1947.

This song was written in 1946 by West Coast newspaperman Vern Partlow and is often referred to as "Talking Atomic Blues." Though "Old Man Atom" was recorded several times in the late 1940s, it was never really a hit. Not until the folk revival of the 1960s did the song reach a wide audience.

"Old Man Atom"

Hiroshima, Nagasaki, Almagordo, Bikini
I'm going to preach you all a sermon
'bout old man Atom, that's me.
I don't mean the Adam in the Bible, damn it,
I don't mean the Adam that Mother Evil laid it.
I mean the thing that science liberated.
The thing that Einstein says he's scared of.
And when Einstein's scared, brother you'd better be scared.
If you're scared of the atom
Here's what you got to do.
You got to gather all the people in the world with you.
Because if you don't get together and do it,
Well first thing you know,
I'm going to blow this world plum to
Hiroshima, Nagasaki, Almagordo, Bikini

Now life used to be such a simple joy.
My cyclotron was just a supertoy.
And folks got born, and worked and married.
And atom was a word in the dictionary.
And then it happened.
The science boys from every climb
They all pitched in with overtime
and before they knew it
The thing was done
And they'd hitched up the power of the god-earned sun
And put a harness on Old Sol
Splitting atoms while the diplomats
were splitting hairs.

Hiroshima, Nagasaki, Almagordo, Bikini.

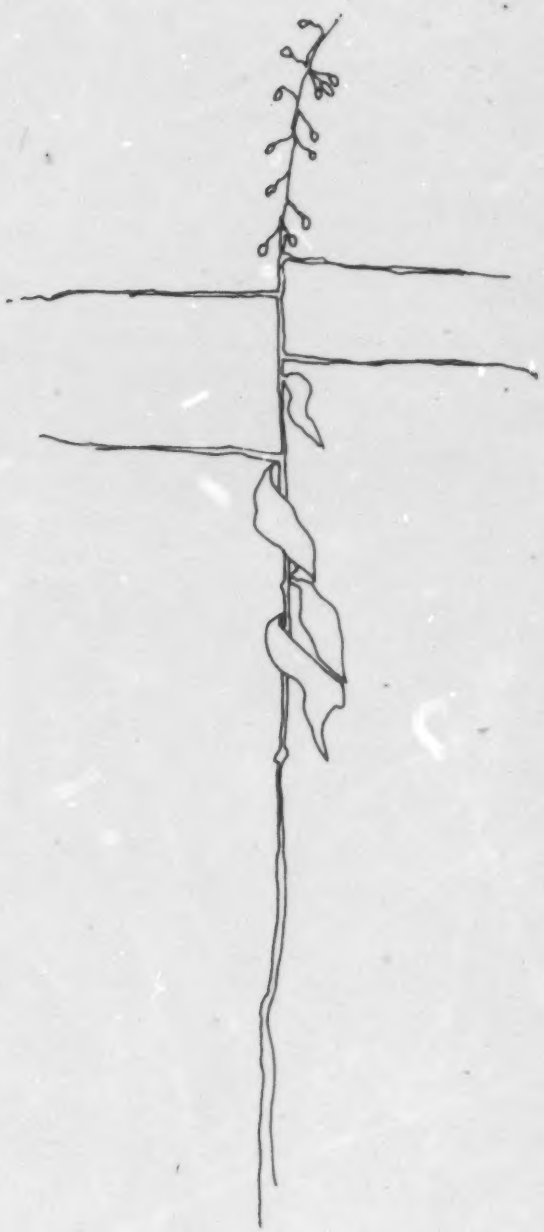
But the atom's here in spite of hysteria.
Flourishes in Utah as well as Siberia.
And whether you're a Black, White, Red or Brown
The question is this, when you boil it down:
"To be or not to be," that's the question.
The answer to it all ain't military datum,
Like who gets there firstest with the mostest atoms.
No, the people of the world must decide their fate.
They got to get together or disintegrate.
I hold this truth to be self-evident.
That all men may be cremated equal.

Hiroshima, Nagasaki, Almagordo, Bikini.

Yes, it's up to the people
Cause the atoms don't care.
You can't fence me in, I'm just like air.
I don't give a hoot about any politics,
Or who got what into which ever fix.
All I want to do is sit around
And have my nucleus bombarded by neutrons.
Now the moral is this, just as plain as day
That old man Atom is here to stay.
I'm going to stick around and that's for true
But ah, my dearly beloved . . . are you?
So listen folks, here's my thesis.
Peace in the world or the world in pieces!

Hiroshima, Nagasaki, Almagordo, Bikini.

"Atomic Sermon" by Billy Hughes and the Rhythm Buckaroos. Recorded ca. 1953.



"Atomic Sermon"

Every Sunday morning and the preacher
gave his warning.
Says you better get down and pray.
You better listen to me mister,
and you listen sister.
We're getting closer to that great day.
You better listen to the teaching
Of the good book I'm preaching.
Said men would fly like birds.
But brother do you hear me?
These things scare me.
I don't know how to put it in words.

You better stop them scientists from researchin'
Cause they done gone too far.
They got these boys flying faster than sound
And the whole world's in a war.
Man that a-tomic energy sure scares me.
But if it will do what they claim
You better start thinking
About saving your soul
Or Sam Johnson ain't my name.

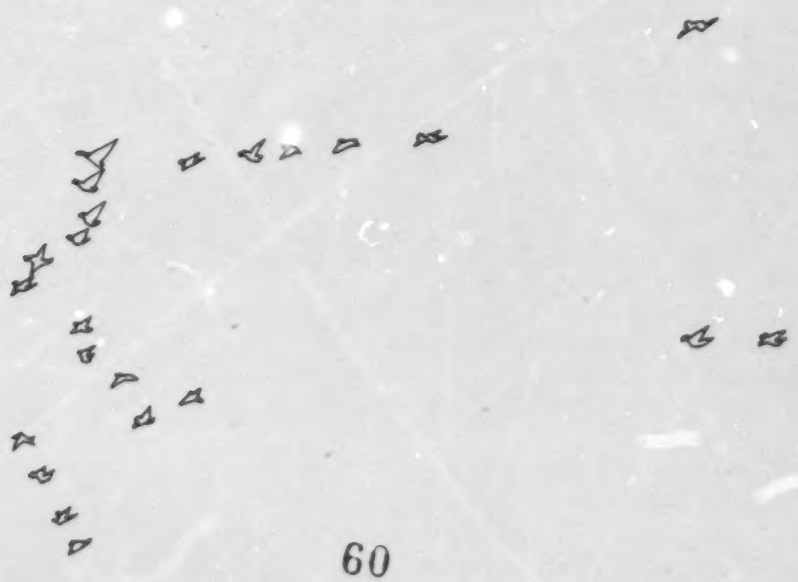
Just a plain bomb is bad
But that A-bomb is worse.
They done named that H-bomb well
Thousand times stronger than that A-bomb is.
Is going to blow us all to kingdom come.
Now I'm not trying to scare you.
I'm just stating facts.
They said they'd build man-made stars.
But that's a job I'm going to leave to the Lord
And I ain't got no business on Mars.

You better stop them scientists from researchin'
Cause they done gone too far.
They got these boys flying faster than sound
And the whole world's in a war.
Man that a-tomic energy sure scares me.
But if it will do what they claim
You better start thinking
About saving your soul
Or Sam Johnson ain't my name.

Now I'm thankful for the drugs
That kills the bugs, the mosquitos,
and the mice and the fleas.
Instead of us trying to get up to Mars
We better get down on our knees
And thank the good Lord
For the world we have
And in closing, I got this to say.
If God intended we should go to Mars,
Why did he put us so far away?

You better stop them scientists from researchin'
Cause they done gone too far.
They got these boys flying faster than sound
And the whole world's in a war.
Man that a-tomic energy sure scares me.
But if it will do what they claim
You better start thinking
About saving your soul
Or Sam Johnson ain't my name.

You think I'm kidding?
Sam Johnson ain't my name!



DAY SEVEN:

Interpretations of National Security

Objectives

To explore different viewpoints about what constitutes national security
To compare military spending to money allocated for social services
To examine the impact of military spending on the U.S. economy

Materials

Photocopies of student worksheets

Activities

A. Review homework. Ask for a few volunteers to share the two articles they brought in and discuss general findings with the class:

- Did the two articles describe the same information? Check this by comparing the who, what, when, where and why in each article.
- How were the articles different from each other?
- How was information presented in each article?
- Why do many cities have more than one newspaper?
- Is news always presented objectively? Explain.

B. Explain to students that different newspapers portray the news in different ways. It is important to learn to read "between the lines," separate fact from opinion, identify value-laden words and detect editorializing. Editorializing is when reporters insert their own opinion into news stories. Give students the following statements and ask them which one is editorializing:

1. Today the U.S. Congress passed a new budget for 1983-84.
2. Today the U.S. Congress passed an unrealistic budget for 1983-84.

Point out to students that the word "unrealistic" represents the reporter's opinion rather than a fact. Hand out to students the Fact or Opinion Sheet (7a). Have them decide whether each statement is a fact or an opinion. (Note: Statements 2, 6, 8 and 9 are opinions. The rest are facts). Explain to students that one way to decide if a statement is a fact or an opinion is to see if it can be proven or documented. A fact can be proven; an opinion cannot be proven. Another way to identify an opinion is to look for value words. Once they identify the opinions on the worksheet, ask them to underline any value words or phrases. Review the worksheet in class.

C. Hand out to students copies of the two editorial cartoons (7b). Discuss:

- How are cartoons different from news articles?
- What is the topic addressed by both cartoons?

In Cartoon A:

- Who does the bear represent?
- What does the symbol on the bear's hat mean?
- What does the bear's button mean?
- What is the cartoonist saying about the need for military spending?

In Cartoon B:

- Why is the cartoon entitled "Windows of vulnerability"? Have you ever heard that phrase before?

- Why are people falling out of only two of the windows?
- What is the cartoonist saying about the need for military spending?
- Which cartoon do you agree with? Why?

D. Hand out to students the two editorials about national security (7c) and the accompanying worksheet (7d). Tell students that the titles of the editorials have been removed but that they represent two different viewpoints about an issue. Have students read the editorials and do the worksheet. Then discuss:

- How is an editorial different from a news article? How is it different from an editorial cartoon?
- Did you find one argument to be more persuasive than another? Why?
- Which article most closely represented your views?

E. Homework: Have students either draw an editorial cartoon or write an editorial on one of the following topics: the arms race, civil defense, nuclear war, military vs. social spending. Also ask students to begin a scrapbook of editorial cartoons focusing on the issues being studied in the curriculum.

Notes:

FACT OR OPINION?

Read the following statements. In the space next to each number put an "F" if you believe the statement is a fact and an "O" if you think it is an opinion. If you think it is an opinion, look for a value word or phrase that makes it so and underline it. Be careful, though, as some opinions do not contain such clues.

_____ 1. In his budget for 1984, President Reagan seeks another year of record peacetime defense spending.

_____ 2. It is bad to build more nuclear weapons.

_____ 3. The largest increases in defense have been in purchases of new weapons and research and development for future military hardware.

_____ 4. The President claims that the Soviet Union has more strategic missiles and bombers than the United States does.

_____ 5. 74% of Americans favor a freeze on the production of nuclear weapons in both the United States and the Soviet Union, according to the latest NBC News poll.

_____ 6. Every new shelter for a missile means fewer new homes for families.

_____ 7. Spending for education constitutes 2% of the Federal budget.

_____ 8. More money should be spent on education than on missiles.

_____ 9. Military spending will definitely improve the U.S. economy.

_____ 10. The United States has more than 9,000 nuclear warheads.

7b

Windows of vulnerability

TWO EDITORIALS

Two Interpretations

Read the following interpretations of the U.S. figures on unemployment, productivity, and military spending. Decide which interpretation you most agree with. Be prepared to state the reasons for your decision.

1. Defense spending causes low productivity and high unemployment.

True national security lies in a strong and just economy, not in new nuclear weapons. The Reagan Administration is embarked on the largest peacetime military buildup in U.S. history—more than $1.6 trillion over the next five years. At the same time, spending on vital domestic programs is being severely reduced.

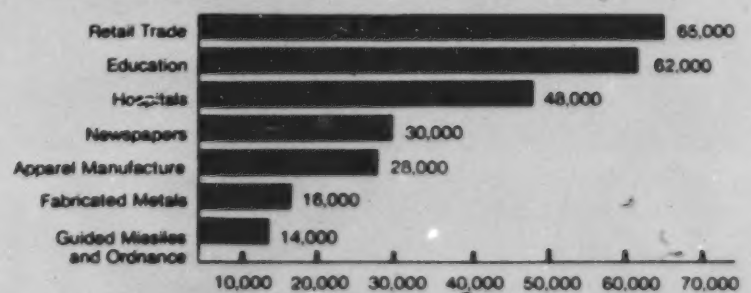
Our nation's industrial base is rapidly eroding. Steel, auto, construction, and other essential industries have been forced to lay off hundreds of thousands of workers. Excessive military spending has contributed to this decline because:

- a dollar spent on the military creates fewer jobs than one spent on civilian activity;
- federal dollars that should be invested in jobs and modern factories are drained off into weapons production;
- huge military budgets contribute to federal deficits and high interest rates.

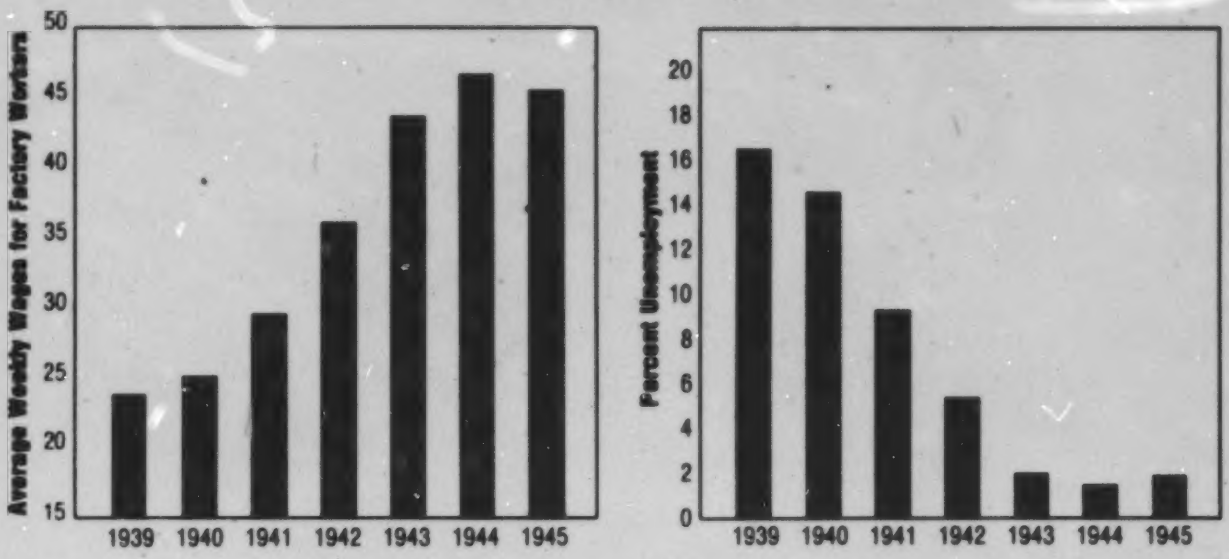
The Reagan Administration argues that vast increases in military spending are needed in order to counter Soviet military superiority. This claim is unjustified. Most military analysts agree that the U.S. and the Soviet Union are roughly equal in nuclear strength.

Instead of being thrown into unneeded weapons systems, the purchasing power of our taxes could build a healthy economy. The tens of billions of dollars could be invested in building homes and transit systems and repairing our roads and bridges. We could have full employment, adequate health care, and high-quality education. We could supply our own energy from renewable resources. Many domestic weapons companies could use the same plants and retrain workers for these productive projects.

Jobs Generated by One Billion Dollars of Expenditure



Economic Conditions 1939-1945



2. Defense spending is necessary for our national security.

The basic national security objective of the United States defense program is to prevent war—particularly nuclear war. This deterrence must be based on the maintenance of strategic nuclear capabilities, which make nuclear war with the U.S. an unacceptable option.

The Soviet military buildup must not be ignored. If the present defense programs are put into effect, it will still take five years before we come close to the Soviet level of weaponry. Unless we demonstrate the will to rebuild our strength and restore the military balance, the Soviets, since they are so far ahead, have little incentive to negotiate with us.

At the same time, military appropriations are the single most important source of investment for corporate America. An increase in the military budget would provide a stimulus to our lagging economy. Orders for new weapons systems create jobs in geographic areas where other industries such as steel, auto, and construction are failing. They offset the massive layoffs currently occurring in this country's industrial regions, and so help to lower the unemployment rates. One has only to look at the unemployment figures from World War II to see that defense spending boosts productivity and lowers unemployment. In the span of just five short years, from 1939 to 1944, unemployment was lowered from 17% to a mere 1%. And construction of weapons systems employs a wide range of workers—from assembly line workers all the way up to top-level scientists.

In this day and age, when the Soviet Union is trying to widen its sphere of influence to our allied countries, we must be able to protect our friends, our vital interests, and ourselves. The sphere of free trade economy and democracy must be kept secure.

INTERPRETING EDITORIALS

Answer the following questions after reading Editorial A:

1. Choose a headline for this article.

2. What is the basis for national security according to the author?

3. How does the author claim military spending affects the economy?

4. How does the author think tax dollars should be spent?

Answer the following questions after reading Editorial B:

1. Choose a headline for this editorial.

2. What is the basis for national security according to the author?

3. How does the author claim military spending affects the economy?

4. Why does the author believe it is important to continue building up the military?

Which editorial do you agree with? Why?

DAY EIGHT:

How Big Is Your Slice?

Objectives

To evaluate how tax dollars are spent
To become familiar with the actual U.S. budget

Materials

Photocopies of student worksheets
Large pieces of paper or newsprint
Markers

Activities

A. Review homework. Ask a few students to share their editorials or their cartoons with the class. You may want to post them all on a class bulletin board.

B. Explain to students today's lesson will focus on taxes and how tax dollars are spent. There are many different kinds of taxes—income tax, sales tax, property tax. Some taxes are paid to the city, some to the state and some to the federal government. Many students may have after-school jobs. Ask them if they know how much money is deducted in taxes from each week's paycheck. Hand out to students the Statement of Earnings and Deductions (8a) and have them write out answers to the accompanying questions. Then review the answers together.

C. Have students list services provided by the federal government that are paid for from the taxes taken out of paychecks. If students have difficulty, ask them to review their daily routine and think about what services are used.

- What services do you use to get to school? (e.g. roads, public transit)
- What services do you get in school? (e.g. lunch, Title I, bilingual programs)
- What services do you use after school? (e.g. parks, playgrounds, community schools)
- What services do your family members use? (e.g. Medicaid, food stamps)
- What services are available to your grandparents? (e.g. Medicare, social security)

You may want to refer to the Budget Categories Sheet (8b) to stimulate ideas.

D. Hand out to students the Budget Categories Sheet (8b) which contains similar categories to those used in the actual budget. (Of course, the actual budget is much more complicated.) Ask students to decide which of the services that they listed are covered under which budget category and write the corresponding budget category on the board next to the appropriate service. Students may not be able to categorize every service listed, but encourage them to do as many as they can. Discuss:

- Were the services spread out through all the categories? If not, under which categories are most services listed?
- Were any categories totally forgotten? If so, which ones and why?

E. Divide the class into five groups. Explain that they are going to act out a lobbying session in Congress. Each group will play a constituency with a particular interest in one part of the budget. The groups are:

—the board of directors of Oil America, Inc.
—the mayor and city council of Westford

—the student-teacher council of Booker T. Washington High School
—the Joint Chiefs of Staff of the U.S. Armed Forces
—the U.S. Congress

You may want to assign roles or allow the groups to choose whom they want to represent. Hand out the appropriate role card (8c), a large piece of paper and a marker to each group. Explain that these role cards are just guidelines. Encourage students to develop the roles further. There may be other issues that will concern them that are not mentioned in the role cards. They will develop their own budget based on $100 billion using the Budget Category Sheet (8b). The groups will then decide on their main funding priority (e.g. education for the student-teacher council) and develop an argument for it to present to the Congress. Each group should pick a representative and a recorder to write the group's budget on the large paper. Give students fifteen minutes to develop their budgets and prepare for the "Congressional" session. Then post the budgets around the room and have each group make a five minute presentation to the Congress stating why their budget priority should receive full funding. Allow the Congress to ask questions after each presentation. After all the presentations, the Congress should decide if it will change its original budget in favor of any of the presentations.

F. Hand out to students copies of the actual budget (8d). Explain to them that this is a simplified version of the real budget. Review to ensure that all students understand it. Then compare the real budget to the various budgets developed by the groups. Discuss:

- Which student budget is most like the actual U.S. budget?
- How does this reflect the priorities behind the federal budget?
- How will this budget affect our society?
- Which student budget is least like the actual U.S. budget? How would society be different if it used this budget?
- Which budget would you choose if you were actually a member of Congress? Why?

G. Homework: Hand out to students three copies each of the Community Concerns Questionnaire (8e). Have them interview three different people in their neighborhood using the survey sheet.

Notes:

8a

STATEMENT OF EARNINGS AND DEDUCTIONS

Below is a copy of a Statement of Earnings and Deductions. It tells you what your *gross pay* is (the total amount you earn before taxes), how much is deducted in taxes and social security, and how much your *net pay* is (the amount you actually get to take home).

The Stop & Shop Companies INC

STATEMENT OF EARNINGS AND DEDUCTIONS

DEDUCTIONS (SEE REVERSE FOR EXPLANATION OF DEDUCTION CODES)

CODE	AMOUNT	CODE	AMOUNT	CODE	AMOUNT	CODE	AMOUNT	CODE	AMOUNT	CODE	AMOUNT	CODE	AMOUNT

SOCIAL SECURITY NO	CO	LOC	DEPT	MO	DAY	YR	CHECK NO	TAX AUTH CODES TX 1	TX 2	TX 3	TX 4	TX 5	CURRENT DIS INS	TOTAL DEDUCTIONS
017428132	07	046	800	10	1	22	83287755922							

REG	PREM	1½ R	1½ P	D T	HOL	SPECIAL PAYMENT	ADJUSTMENT	TYPE OF PAYMENT	ST	YEAR TO DATE DIS INS	NET PAY
2100								WAGES	A		***71.37

CURRENT EARNINGS & TAXES (SEE REVERSE FOR EXPLANATION OF TAX CODES)

EARNED GROSS	TAXABLE GROSS	F.I.T.	F.I.C.A.	TAX 1	TAX 2	TAX 3	TAX 4
84.00	84.00	5.00	5.63	2.00			

YEAR TO DATE EARNINGS & TAXES (SEE REVERSE FOR EXPLANATION OF TAX CODES)

EARNED GROSS	TAXABLE GROSS	F.I.T.	F.I.C.A.	TAX 1	TAX 2	TAX 3	TAX 4
402.00	402.00	22.00	26.93	10.00			

FORM NO 50-1008 REV 11/82

DETACH AND KEEP THIS STUB FOR YOUR RECORD.

1. What is the gross pay?

2. How much money is deducted for the federal income tax (F.I.T.)?

3. How much money is deducted for social security (F.I.C.A.)?

4. How much money is deducted for state income tax (Tax 1)?

5. What is the net pay?

6. Approximately what percentage of the gross pay goes to taxes?

BUDGET CATEGORIES

Below are listed 14 categories. These are categories that make up the budget of the United States. The task of your group is to decide how much money to spend on each category while taking into account your group's particular interest. Your group has a total of $100,000,000,000 ($100 billion) to spend. Note that category 14 already has a cost assigned to it. This is money owed by the country to pay back money it has borrowed. It is a given amount each year that the president has no control over. So, in reality, you have just $87 billion to work with instead of $100 billion. All the remaining money should be disbursed among the other 13 categories, although money does not have to be given to each and every category. Distribute the money in billions of dollars.

Category	Amount
1. National defense a. Armed forces b. Conventional weapons c. Nuclear weapons	
2. International affairs and diplomacy (e.g., World Bank loans, foreign economic and military aid)	
3. Science, space, and technology (e.g., NASA)	
4. Energy (e.g., nuclear, solar, and geothermal research and development)	
5. Natural resources and environment (e.g., care and protection of wildlife and land)	
6. Agriculture (e.g., dairy and grain subsidies)	
7. Business and housing development (e.g., public housing, small business loans, private subsidized housing)	
8. Transportation (e.g., mass transit, roadbuilding)	
9. Community and regional development (e.g., business subsidies, city redevelopment)	
10. Education, job training, and social services	
11. Health care and hospitals	
12. Income security (Social Security, retirement, and unemployment)	
13. Administration of government and justice (e.g., law enforcement, Legal Services)	
14. Interest on the national debt (a fixed cost) (money owed to the Treasury from past borrowings)	$ 11 billion
Total	$100 billion

ROLE CARDS

Board of Directors of Oil America, Inc.

You are on the board of directors of Oil America, Inc. one of the largest oil companies in the world. You have subsidiaries (branches) in 35 other countries in Europe, Africa, Asia and South America. You had been growing rapidly and making profit. Recently, however, you lost some resources in the Middle East due to internal troubles in countries there, and a group of oil refineries were sabotaged in South Africa by a black nationalist group. Another problem is that consumption has been dropping as people buy smaller, more fuel-efficient cars and conserve energy in home heating.

You are concerned about the economy. When the economy is poor, people cut down their oil consumption—they don't buy big cars, they don't take as many trips, they limit their use of home fuels.

You need to pursue exploration for more oil resources. You are particularly interested in areas like the California coastline and George's Bank in New England. The only problem is that these areas have been protected by the Wilderness Act. You have also been interested in exploring new energy sources such as nuclear and geothermal power.

You want Congress to improve the economy. You are also concerned about protecting your interests abroad and getting money for further research and development projects. Develop a national budget based on your interests and priorities. Also, you must decide what you want most in the new budget and prepare an argument to convince the Congress to support your interests.

City Council of Westford

You are members of the Westford City Council. Westford is a medium-sized city in the Midwest. Many residents of your city work for the auto industry. As members of the city council, you are faced with solving some serious problems.

Because of a slump in car sales, many autoworkers have been laid off. Along with unemployment, more and more people have lost their homes and have nowhere to live. As poverty increases, so does the crime rate. Violent crimes are up by 10% and property crimes are up by 20%. Unfortunately, because of the loss of revenues, you have had to lay off police.

You have also been forced to close the community schools which offered a variety of after-school programs for youth, and you no longer have the resources to maintain the parks and playgrounds. Because of unemployment, the city is unable to collect enough money in taxes to fund the services people have been using such as health clinics and daycare centers. With the decline of the auto industry, the downtown area of Westford is deteriorating. But you do not have the funds for refurbishing buildings or new construction. This is causing other businesses to move out of the city.

You need help from the federal government. Decide what the key programs are in Westford that require federal funding. Some things to consider include:

- Who do you want to aid—the elderly, the unemployed, the auto industry, youth?
- How can you keep the center city from decaying?
- What programs would begin to address some of your problems—job training in new fields, public works, community crime control?

Develop a national budget based on your interests and priorities. Also, prepare an argument to present to Congress to support your proposals.

Joint Chiefs of Staff of the U.S. Armed Forces

You are on the Joint Chiefs of Staff of the U.S. Armed Forces, who are the highest ranking military officers of the country. You are proud of your role in making the United States the strongest country in the world. Since the Vietnam conflict, however, the country seems to be going soft. When Iranian students seized the U.S. Embassy, we did nothing. When the Soviets moved into Afghanistan, we did nothing. When Somoza was overthrown in Nicaragua, we did nothing. It is time to rebuild the strength of America. To protect our standard of living, we must be willing to defend our interests at home and abroad.

You have a large volunteer army available. However, in the 1980s the true measure of might is in a nation's technology. You know that the United States has the capability and resources to build the most advanced weapon systems in the world. The research and development branch of the Pentagon has been developing some very effective new weapon systems.

During recent months, you have been getting a lot of pressure about military spending. Some people in Congress think that more money should go to social services such as education, health and housing. But you feel that if we don't have a strong defense against the Soviet Union and our other enemies, we could be destroyed. You agree that we need to strengthen the economy, but part of doing that is being willing to defend, militarily if necessary, the interests of U.S. corporations abroad so that they can continue to grow and make profits.

How are you going to convince Congress of the need for a strong military? Consider some of the following questions:

- Which programs do you want to expand?
- Could some nuclear weapons research be included in the categories of energy and science?
- What role should armed services personnel play? Do we need better trained officers?

Develop a national budget based on your interests and priorities. Also, consider your priorities and prepare an argument for the Congress that will support your proposals.

Student-Teacher Council of Booker T. Washington High School

You are on the student-teacher council of Booker T. Washington High School. The high school is located in a major east coast city. The student body is 45% black, 30% white, 20% Hispanic and 5% other. The majority of students do not go on to college because they cannot afford the cost. Some students go into the military, some get jobs, and some hang out on the streets.

Students in the school face many problems. More and more of their parents are being laid off from their jobs. Other families are being cut off from welfare and disability pensions. The tensions caused by this economic crunch at home appear in the school in the form of increased fighting among students, more behavior problems in the classroom and increased truancy. Students are having a harder time finding after-school jobs.

Your school, like many other inner city schools, faces many cutbacks. The number of teachers in the school was recently reduced by 20%. The average class size is 38. Many programs have been cut or eliminated including music, art, gym, science, remedial reading, math and bilingual education.

Obviously, you cannot solve these problems alone. However, you will be sending a delegation to the Congressional hearings on the budget.

- How can you convince Congress that support of public education should be a top priority?
- Are there particular programs or issues that you feel take priority over others, e.g. re-hiring staff or re-funding remedial programs?

Develop a national budget based on your interests and priorities. Also, consider your priorities and prepare an argument for the Congress that will support your proposals.

U.S. Congress

You are members of the U.S. Congress. You make the final decisions about how federal tax dollars will be spent. There are many factors that go into your decision. You have to look out for the best interests of the country as a whole. You also want to represent the interests of the people who voted you into Congress. You need to please the people who donated large amounts of money to your campaign, and you have to consider favors and deals you have made with other Congressional representatives. Ideally, you would like to fund all government programs fully. Unfortunately, there is only a limited amount of money to go around. Some questions to consider in developing the budget include:

- How can we deal with the unemployment problem?
- How much money do we need for our national defense?
- Does big business need more assistance from the government to boost the economy?
- Should we be ready to defend U.S. business interests in other countries?
- What do our cities need?
- Are farmers and small businesses getting enough support?
- How responsible should we be for the problems of the poor?
- What role does public education play in the future of our country?

Considering these issues and any others that may come up in your meeting, draw up a draft budget proposal. Then, it is your responsibility to conduct the budget hearings. Use the following as a guideline:

1. Once you have finished your budget proposal, call the session to order.
2. Have each group make a five minute presentation. Feel free to ask questions of each group. Some possible questions include:

- How will your program benefit the country?
- Does it represent the interests of a small minority or a majority of the people?
- Why should money go to your program rather than another?

3. After hearing all proposals, meet among yourselves for five minutes to decide if you will make any changes in your budget.
4. Re-convene the session and present your final budget to everyone.

THE 1983 BUDGET

The 1983 national budget is shown below in a simplified form.

Read through this budget and compare these figures to the budget your group created. How similar are they? What were the differences?

Category	Percent	Amount (in billions)
1. National defense	29.0	$239.2
a. Armed forces	(14.5)	(119.3)
b. Conventional weapons	(11.6)	(96.0)
c. Nuclear weapons	(2.9)	(23.9)
2. International affairs and diplomacy	1.5	11.9
3. Science, space and technology	1.0	7.8
4. Energy	0.5	4.5
5. Natural resources and environment	1.5	12.1
6. Agriculture	2.5	21.1
7. Business and housing development	0.5	1.9
8. Transportation	2.5	21.9
9. Community and regional development	1.0	7.4
10. Education, job training and social services	3.0	26.7
11. Health care and hospitals	10.0	82.4
*12. Income security—benefits for the needy (Social Security, retirement, & unemployment)	34.0	282.5
13. Administration of government and justice	2.0	17.5
*14. Interest on the national debt (a fixed cost)	11.0	88.9
Total	100.0	825.8

*These categories are fixed, meaning they are not adjustable when determining the budget each year. The figures are determined by budgets of previous years.

Statistics compiled from the U.S. Office of Management and Budget.

COMMUNITY QUESTIONNAIRE:

What Concerns You?

Which of the following do you think are problems in your community and in our country today? Circle #1 if you think it is a major problem, #2 if you think it is a minor problem and #3 if you don't think it is a problem.

	Major Problem	Minor Problem	Not a Problem
1. Quality of education in the public schools	1	2	3
2. Opportunities for higher education for everyone	1	2	3
3. Crime	1	2	3
4. Adequate police protection	1	2	3
5. Adequate fire protection	1	2	3
6. Unemployment	1	2	3
7. Trash in the streets	1	2	3
8. Recreational facilities—parks, community schools, pools, etc.	1	2	3
9. Quality of health care	1	2	3
10. Public transportation	1	2	3
11. Availability of housing	1	2	3
12. Adequate care for the elderly	1	2	3
13. Road and highway conditions	1	2	3
14. Price of consumer goods	1	2	3
15. Pollution	1	2	3
16. Inflation	1	2	3
17. Availability of assistance for the needy	1	2	3
18. Enough food for all	1	2	3
19. Protecting our country from attacks	1	2	3
20. Threat of nuclear war	1	2	3

Other?

DAY NINE:
Our Quality of Life

Objectives
To identify how students' communities have been affected by budget cutbacks
To relate specific budget cutbacks to changes in the quality of life

Materials
Photocopies of student worksheets

Activities
A. Review homework. Tally results of the questionnaires students completed. Write the results on the board to show the range of reactions for each question. Discuss:

- What concerned a large percentage of people?
- Why do you think these problems exist?
- Do these problems have anything to do with military spending increases? If so, what?

B. Hand out the cutbacks sheet (9a) and the gains sheet (9b). Have students read each. Discuss:

- What kinds of programs received cuts in their budgets?
- What effect do you think cuts will have on these programs?
- What kinds of programs received increases in their budgets?
- What effect do you think these increases will have on these programs?
- Are any of the concerns that people expressed in the questionnaire the same as any of the programs listed in these sheets? If so, which ones? Were funds for these programs cut or increased?
- Do you think there is any correlation between the concerns people expressed in the questionnaire and the specific programs that received cutbacks or increases? If so, what? If not, why?

C. Ask students to list the names of five people they know who have graduated or dropped out from high school within the last three years. Then, ask them to write down next to each name what that person is doing. Using their friends' experiences and their own interests, brainstorm a list of jobs on the board that students would like. Ask students to choose the one job that appeals to them. Have them write down three steps they would have to take to get that job. For example, to be a clerical worker, a student could enroll in a training program, take business courses in high school and practice skills at home. Once finished, ask students to share their goals with the class.

- How long will it take to prepare for the future job?
- Will it require money, e.g., to attend college?
- Can you pursue this job and train for it in your own city?

D. Have students refer to the cutbacks sheet (9a) and the gains sheet (9b) again. Discuss how the distribution of the federal budget could affect their job futures.

- Have the areas in which you want jobs been expanded, reduced or remain the same?
- Which job areas are expanding? Which are shrinking?
- Are programs that can help you prepare for your job being funded?
- Does this information affect your future job choice in any way? If so, how?

E. Explain to students that Congress has often passed jobs bills—legislation to provide public money for job training, education or job creation programs. Ask students to imagine that Congress has just passed a $100 million jobs program and that they have been asked to advise Congress on how to use this money. Divide students into groups of three to four each. Hand out to each group the Jobs Planning sheet (9c). Ask students to divide the $100 million among the various categories listed. Discuss:

- Do you think the government is spending money in these areas? Why or why not?
- Which areas did you choose as the most important for government spending? Why?
- Do you think your neighborhood would change in the next few years if the government spent more money in these areas? If so, how?

F. Homework: Ask students to find one or two jobs programs available to them in their city. In order to obtain this information, suggest that they look in the phone book, call their city hall or the Division of Employment Security or talk to their guidance counselor.

Optional: Ask students to research what jobs bills are currently under consideration in Congress. Compare this to other jobs programs, such as those during the Depression of the 1930s or the Great Society experiment of the 1960s. Prepare a report for class.

Notes:

CUTBACKS IN THE UNITED STATES 1982 BUDGET

1982 was a year in which there were significant changes in federal spending priorities from previous years. The 1983 budget you looked at is a reflection of these spending priority changes.

Following are 26 major programs that were cut in President Reagan's fiscal year 1982 budget, along with the dollar amounts cut and the percentage of each program's cuts. In all, there were 48 major programs in the budget that received cuts. The Department of Defense is the only department that didn't receive any cuts. Look through this list and consider the consequences of these cuts.

Program	Dollars Cut	% of Program Cut
AFDC—Welfare	900 million	12
Low-income fuel assistance	100 million	.5
Food Stamps	1.2 billion	10
Child nutrition	500 million	10
Food for Peace	200 million	18
Title I—Education	230 million	7
Bilingual Education	23 million	14
Student Financial Aid	450 million	11
Student Loan	500 million	30
Arts and Humanities	38 million	12
Community Health	250 million	22
Health Planning	64 million	50
Preventive Health	54 million	16
CETA—Comprehensive Employment Training Act	4.4 billion	60
OSHA—Occupational Health and Safety Act	29 million	14
Consumer Product Safety	10 million	24
Legal Services—legal aid for the poor	180 million	24
UMTA—mass public transportation	1.7 billion	24
Amtrak—public railways	146 million	16
Solar Energy	185 million	41
Geothermal Energy	88 million	63
Conservation—environmental protection	219 million	48
Fish and Wildlife—protection of wildlife	30 million	10
Land and Water Fund	230 million	100
New Public Housing	7.6 billion	30
Community Development Block Grants	330 million	6

The total amount of cuts to major programs in the budget is $30,251,000,000.

Questions to consider:

- How do these cuts affect our quality of life now and in the future?
- Most of this money was transferred to the defense budget. Would you make the choice to take money from domestic programs to build up the military? Why or why not?

(Figures compiled from the *Boston Globe*, January 18, 1982)

PROGRAMS THAT RECEIVED INCREASED MONIES

United States 1982 Budget

1982 was a year in which there were significant changes in federal spending priorities from previous years. The 1983 budget you looked at is a reflection of these spending priority changes.

Following are 17 major programs that received increases in federal dollars for their 1982 budgets. As you can see, except for the last five, all programs are defense-related. In fact, military spending was approved $31.1 billion above the previous year's budget. Included in this amount was $16.8 billion targeted for defense procurement, mostly nuclear weapons.

Program	Dollars Gained	% of Program Gains
Defense research and development	2.3 billion	20
NASA research and development	430 million	10
Procurement—buying of weapons	16.8 billion	35
Operation and maintenance of weapons	5.5 billion	10
Personnel—armed forces	1.2 billion	3
Military construction	1.8 billion	32
Atomic energy—nuclear research	1.0 billion	28
Foreign military aid	327 million	51
Nuclear power research and development	64 million	7
Economic Support Fund—foreign aid	472 million	22
AID development assistance—foreign aid	110 million	9
World Bank loans—foreign aid	200 million	40
Head Start—day care	94 million	11
Medicaid—health care for the needy	850 million	5
Education for the handicapped	57 million	6
National Institutes of Health	80 million	2
Operating subsidies—for public housing	90 million	7

The gains in these seventeen programs represent $31,204,000,000.

Questions to consider:

- Compare the total amount of cuts to the total amount of gains in these programs. What is happening to this budget?
- Do you agree this should happen? Why or why not?

(Figures compiled from the *Boston Globe*, January 18, 1982)

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JOBS PLANNING

You have been asked by Congress to advise it on how to spend $100 million in jobs programs. Below are 10 different categories to which you can allocate money.

Program	Amount
1. College loans, scholarships and work-study programs	
2. Vocational training in high schools	
3. ROTC (Reserve Officer Training Corps)—training available to high school and college students for military careers	
4. Subsidies to private industry to run job training programs	
5. CETA (Comprehensive Employment and Training Act)—government-run jobs training programs	
6. Job counseling and career planning	
7. Jobs for Youth—job training for high school dropouts	
8. GED (General Equivalency Diploma)—program for adults (over 18 years old) to earn high school degree	
9. Subsidies to private industries for on-the-job training (additional wages for workers learning a trade)	
10. Job training programs in the armed services (that parallel civilian jobs)	

DAY TEN:

Putting the Pieces Together

Objectives

To re-examine students' attitudes about issues covered in the curriculum
To review key concepts covered in the curriculum
To review actual proposals in Congress about national defense and spending priorities
To discuss the responsibilities of an informed citizenry
To do a final project that ensures that students take action according to their own, personal beliefs

Materials

Photocopies of student worksheets
Students surveys from Day One
Tally results from student surveys

Activities

A. Review homework. Ask students to share any information they found about training programs or other educational opportunities available to them. Discuss in class:

- What kinds of resources are available to students?
- How can students take full advantage of these programs?
- How are these programs helping people improve their lives?
- What other programs would be useful in helping young people?
- Do you know anyone who completed a training program? If so, did s/he get a job? What kind?

B. Hand out to students copies of the student survey sheet from Day One (1a). Have them repeat the survey and tally their answers on the board. Then hand back to them the surveys they completed at the beginning of the unit to compare their original answers to the current ones. Write the tally from Day One next to today's answers and compare:

- Have attitudes about some of these issues changed? If so, why?
- Around which issues did class attitudes change the most?

C. Write the following key concepts covered in the curriculum on the board:

threat of nuclear war
the arms race
national security
military spending
quality of life

Ask students to identify at least one or two statements in the survey that relate to each of these. Then, using the survey tally results, ask them to summarize the class attitude about each concept on the board.

D. Explain that you will look at some of the actual proposals being debated in Congress that relate to these various issues. Hand out the National Security Options sheet (10a). Review the proposals to ensure that students understand them.

E. Tell students that they will play U.S. Representatives. They are to decide which option from the sheet they support the most. Each representative's goal is to convince the other representatives to vote for that option. Tell students that you will be the Speaker of the House and will recognize them to speak. They should present their views

briefly but persuasively. Allow them to choose their own option. If not all options are covered, assign them to some students.

F. Pass out to students the quotation from former President Jimmy Carter about active, responsible citizenry (10b). Discuss briefly:

- How important is free debate in our society? Should there be a limit on it?
- Do you agree that "if the system is to work, all of our people must participate?" Why or why not? What if people do not participate?
- What responsibilities does Carter feel an American citizen has?

G. Pass out the Action Sheet (10c) to students. These sheets provide suggestions for possible student actions on the issues in the curriculum. Refer students to the five issues put on the board at the beginning of the class. Tell them that for a final project they must pick one of these issues and, using the Action Sheet (or their own ideas), decide upon a method to voice their own opinion in this matter. You may want students to do this in small groups by interest, or the class may decide together on a project. This can also be an additional means of evaluation for you.

Notes:

OPTIONS FOR NATIONAL SECURITY

1. Bilateral Disarmament

Both the United States and the Soviet Union would agree to reduce gradually their numbers of weapons. There would be a system of monitoring each side's activities to ensure that the treaty is respected.

2. Unilateral Disarmament

The United States would decide to reduce arms regardless of what the other side does. Our country makes no demands on the Soviet Union and acts on good faith to encourage peace.

3. Mutual Freeze

Both the United States and the Soviet Union agree to halt new weapons development, testing, and deployment. They do not agree to reduce arms. The freeze does not allow the countries to equalize their holdings but stops development at present levels.

4. No First Use

The United States pledges that it will not, under any circumstances, be the first country to use nuclear weapons against another. The United States would use its nuclear arsenal only if it was attacked with nuclear weapons by another country first.

5. Expand Communications

In order to build more mutual confidence between the United States and the Soviet Union and to lessen the possibility of a mistake or misunderstanding, the two countries commit themselves to improving communications. Ways of doing this include expanding the uses of the hotline between Moscow and Washington, D.C., establishing a military crisis center that involves both countries, and agreeing to give advance notification of any missile testing.

6. Build the MX Missile

The United States would build 100 MX missiles and deploy them in one cluster in Wyoming. The MX missile contains 10 to 25 one-megaton nuclear warheads, the largest and most accurate weapon built to date. The MX missile would make our land-based missile system equal or superior to that of the Soviets.

7. Increase Conventional Weapons

Rather than build more nuclear weapons, the United States would concentrate its defense spending on expanding its non-nuclear arsenals. A draft could be instituted to enlarge the armed forces. More tanks, jet fighters, aircraft carriers, non-nuclear submarines, etc. would be built so that we can still protect ourselves and our interests, but not increase the threat of world destruction.

10b

"It's Up to the People"

"Our system of government rests on the assumption that in an open society, with free debate and access to the facts, truth would eventually overcome error . . . . But if the system is to work, all of our people must participate. We all must train our minds to learn the facts and understand the issues. We must all vote and make our wishes known. All of our citizens must stand against injustices to any one of them . . . . If they are apathetic, government will be apathetic. But if the people care—and show it—the government will act. How wisely and how effectively is largely up to the people . . . . "

Former President Jimmy Carter, from *Perspectives*, 1977, Close Up Foundation, Washington, D.C.

10c

ACTION SHEET

The thought of nuclear war is paralyzing to many people. To some, it is a necessary evil that we must endure to ensure our national security. To others, it is a force that threatens humankind, while the arms race siphons funds away from programs that improve our quality of life. Some people feel that we need more money for defense, others believe we must re-direct public money toward domestic social programs. Whatever you believe, it is important to act on those beliefs. If you don't, you will find that decisions will be made without your input and you will feel increasingly powerless. Below are some things you can do in your school and community.

1. *Write a letter to your state or federal elected officials.* Ask for their views on the issues of arms limitation and military vs. social spending. Tell them what your opinions are. Letters or Western Union mailgrams can be especially effective if you can get a letter writing campaign going. Start one in your school or community organization.

2. *Run a referendum in your school.* It is a good way to get people thinking about the choices we have before us. It could be patterned after a real referendum question or you can draft your own highlighting concerns in your school.

3. *Plan a forum at your school.* You could show a film or slides or invite some outside speakers and hold a debate.

4. *Have a contest to design a poster.* Some topics could be pros and cons of the arms race *or* the "Soviet threat."

5. *Write and perform a skit* for the class or for a school assembly.

6. *Set up a bulletin board* that highlights the issues your class found particularly relevant or controversial. You could do an informational display or have two sides of a particular issue represented.

7. *Write a letter to the editor* of your local newspaper.

INFORMATIONAL AND CURRICULAR MATERIALS

For Teachers

Abrams, Grace and Schmidt, Fran. *Learning Peace.* Philadelphia: Jane Addams Peace Association, 1972. 50 pp. Age range: grades 7-12. Useful bibliography: books, films, list of peace organizations.
Activities and assignment ideas on: global conflict resolution, distribution of world resources and population, nationalism, world problems, and international organizations.

Bressler, Marion A. and Bressler, Leo A.*Peace or War.* Englewood Cliffs, N.J.: Prentice-Hall, 1977. American Problems series, ed. J.R. Fraenkel. Paper, 120 pp.
Chapters on the nature of war, causes, effects, alternatives. Selections from writings about war: Anne Frank, *All Quiet*, poetry of Wilfrid Owen, survivor of Hiroshima; also some cartoons, illustrations. Questions and suggested activities at each chapter end.

Educating for Peace and Justice: Manual for Teachers in 4 volumes (prices include postage).
I. National Dimensions $9.00
II. Global Dimensions $9.00
III. Religious Dimensions $9.00
IV. Teacher Background Readings $5.00
Available from the Institute for Peace and Justice, 2747 Rutger, St. Louis, MO 63104
Units contain teaching strategies for elementary, secondary, and college levels; action possibilities, student readings, case studies, bibliographies.

"Final Document: Special Session of the General Assembly on Disarmament." U.N. Department of Public Information, New York 10017, 1978. 26 pp. (pamphlet) free.
Comprehensive outline of need for and steps toward achieving disarmament. Nuclear disarmament a priority. Stages: 1) cessation of improvement of weapons; 2) cessation of production; 3) progressive reduction of stockpiles. Nuclear-free zones a positive step. Format monotonous.

Sivard, Ruth Leger. "World Military and Social Expenditures 1981." Order from: World Priorities, Inc., Box 1003, Leesburg, VA 22075. 44 pp. $4.00/copy, $2.50 for 25 copies or more.
A worldwide statistical picture of military and social expenditures—alliance by alliance, area by area; charts, tables, maps, etc. This is an annual accounting of the use of world resources for social and military purposes.

"Teaching Global Issues through Simulation: It Can Be Easy," *Intercom* 75. Center for War/Peace Studies, 1974. Paper, 32 pp. Adult level.
Entire issue devoted to simulation games which help teach global issues. The what, why, and how of simulation games is discussed.

Ground Zero, *Nuclear War: What's In It For You?* N.Y.: Simon and Schuster Pocketbooks, 1982. $2.95.

For Students

"Armaments or Disarmament? The Crucial Choice." Stockholm International Peace Research Institute, 1978. 32 pp. (pamphlet). This brief but informative overview of world investments in advanced weapons of mass destruction; of the social, economic, and environmental costs of this arms race; and of past achievement and future prospects for arms control can serve as a useful introduction to a consideration of the question posed in its title.

Boston Study Group, *The Price of Defense.* N.Y.: *New York Times* Books, 1979. Order from *The Nation*, 72 Fifth Ave., New York City 10011. $4.95
This book describes our weapons systems, explains why they "exceed military needs," and offers an alternative plan for reducing our military equipment without sacrificing adequate defense.

Caldicott, Helen. *Nuclear Madness—What You Can Do.* Brookline, MA: Autumn Press, 1978. 120 pp. $3.95
Helen Caldicott's struggle against atmospheric testing; effects of radiation, description of fuel cycle, problem of waste disposal, danger of plutonium, arms race—mutual assured destruction, appeal for action.

Fraenkel, Carter, Reardon. *Peacekeeping.* N.Y.: Institute for World Order, Inc., Random House. Perspective in World Order Series, ed. Fraenkel. 1973. Paper, 71 pp. Level: high school/college.
Various peacekeeping models described in sections, each section containing description of case, "what might have happened," "what did happen." Ethiopia 1934, The Congo 1960, Cuba 1962, Malaysia 1969—future, hypothetical case of how world order might work.

Lens, Sidney. *The Day before Doomsday.* Boston: Beacon Press, 1977. 274 pp. $5.00
Sidney Lens writes a history of U.S. nuclear arms from Hiroshima to the administration of Gerald Ford. Lens details those occasions in which the U.S. government has considered the use of nuclear weapons since Hiroshima-Nagasaki, and calls for popular mobilization to reverse the drift toward doomsday.

Metcalf, Reardon, Colby. *The Cold War and Beyond From Deterrence to Detente—to What?* N.Y.: Institute for World Order, Inc., Random House. Crises in World Order Series, ed. Metcalf, 1975. Paper, 71 pp. Level: high school/college.
Case studies: Hungarian Rebellion, Cuban Missile Crises, Arab-Israeli 1973 War. Each section begins with account of what happened with a chronology, photographs; ends with suggestions for study useful for information, starting discussions.

Reardon, Colby. *War Criminals, War Victims.* N.Y.:Institute for World Order, Inc., Random House, 1974. Crises in World Order Series, ed. Metcalf. Paper, 55 pp. Level: high school/college.
Cases: Andersonville, Nuremburg, Hiroshima, My Lai. Considerations of war and the individual through these four histories. Photos and transcripts of trials; suggested questions and issues for study.

Sharp, Gene. *Making the Abolition of War a Realistic Goal.* N.Y.: Institute for World Order, 1980. Paper, 14 pp. (pamphlet)
This tightly reasoned essay offers valuable descriptions of the nature of war, the meaning of defense, and the circumstances under which a "civilian based defense" would be a practical, preferable alternative to defense based on military force and the use of violence.

AUDIO-VISUAL AIDS

These audio-visual aids are available through Audio-Visual Resources for Social Change at the following address, unless otherwise indicated:

To reserve a film or slide show, please phone the AFSC Film Library:
2161 Massachusetts Ave.
Cambridge, MA 02140
617 661-6130

The AFSC Film Library is a part-time operation and it is quite possible the librarian will not be in when you call. In this case, please leave your number and the call will be returned.

Films

Paul Jacobs and the Nuclear Gang. 16mm color, 1979, 60 min.
Dramatic story of the cover-up by the U.S. Nuclear Program of the hazards of radiation to American citizens.

Hiroshima: A Document of Atomic Bombing. B/W with some color, 30 min. Produced in Japan.
Japanese photographers documented the suffering inflicted by the American use of the atom bomb on Hiroshima.

War without Winners. 16mm color, 1978, 28 min.
A look at arms control from the point of view of common people. Moving segments of Eisenhower's speeches against development of nuclear arsenals. Includes interviews with Russians and Americans on the street and arms control specialists. Narrated by Rear Admiral Gene R. LaRocque, U.S. Navy.

Clouds of Doubt. 1980, 50 min.
Covers the Nevada atomic bomb tests and government suppression of medical consequences to military personnel and nearby residents, many of whom became victims of cancer and related radiation-induced ailments. From Physicians for Social Responsibility.

NO-FIRST-USE: Preventing Nuclear War. 16mm, color, 1982, 30 min.
Available from Union of Concerned Scientists, 1384 Massachusetts Ave., Cambridge, MA 02238. Emphasizes the need for a major shift in U.S. defense policy, and shows we can both lessen the threat of nuclear war and improve our national security. Features a number of prominent experts.

Slides

Transfer: From Military Spending to Human Needs. Slides with script, 1977, 25 min.
Clearly demonstrates how money put into educational and social programs could better stimulate the economy (and provide more jobs) while providing more for human development than a stockpile of costly weapons.

The Biology of Nuclear War. Slides with script, 1982, 20 min.
Available from Carolina Biological Supply Co., Burlington, NC 27215. Excellent description of the biological effects of a nuclear war.

The November 11th Convocation: The Threat of Nuclear War. Slides with script and tape, 1981, 30 min.
Available from Union of Concerned Scientists, 1384 Massachusetts Ave., Cambridge, MA 02338. Depicts the history of the nuclear arms build-up. A thorough look at U.S. and Soviet weaponry as well as the effects of a nuclear explosion.

Slide Shows

Acceptable Risk? The Nuclear Age in the U.S. Slide show with cassette, 1980, 35 min.
A step-by-step overview of the production of nuclear power and nuclear weapons, from uranium mining to electricity, bombs, and radioactive waste.

The Race Nobody Wins. Slides with cassette tape, 1981, 15 min.
A presentation on the dangers and costs of the international arms race. Baffling technology is explained in plain English. Tony Randall, narrator.

Whose Budget Is It Anyway? Slide show with cassette, 1982, 25 min.
Shows the impact of military spending on the economy, especially on human services. Available from Mobilization for Survival, 727 Massachusetts Ave., Cambridge, MA 02139 (617 354-0008).

The following five slide shows are available from the Packard Manse Media Project, Box 450, Stoughton, MA 02072 (617 344-3259).
Hostage at Hell's Bottom: The Economy and the Pentagon. Slides with script and cassette, 1982, 19 min.
Dramatically demonstrates connections between increased military spending and unemployment, inflation, cutbacks, drain on industrial capacity, and national security. Highlights economic conversions as a goal.

I Have Three Children of My Own. Slides with script and cassette, 1979, 20 min.
Features Dr. Helen Caldicott on the medical implications of nuclear power and nuclear waste on human life. The person and political dimensions are brought together in compelling combination.

John, Marv, MIRV and MARV. Slides with script and cassette, 1979, 15 min.
Focuses on the nuclear arms race, the cold war system perpetuated by the U.S. and U.S.S.R., and the real meaning of national security.

No Jobs Is Bad Music. Slides with script and cassette, 1979, 20 min.
Dispels the four major myths about unemployment. Interviews with unemployed workers personalize the harsh reality and bring to light the facts.

The Last Slideshow. Slides with script and cassette, 1983, 20 min.
The history of weapons imagined, then built, then used, leading to a precarious balance of terror between the U.S. and U.S.S.R. Concludes on a hopeful, empowering note, with current headlines and June 12th.

Videocassettes

Classified Critical: Can We Survive this Century? 30 min.
TV documentary.

The Last Epidemic. 48 min. color videocassette.
Debunks the notion that there would be survival after an exchange of nuclear weapons. Shows what the aftereffects of a 20-megaton bomb would be on San Francisco.

Mobilization for Survival Audio-Visual Guide resources: 3601 Locust Walk, Philadelphia, PA. 19104 (215 386-4875).

Nuclear Power: Miracle or Menace? 1979, 25 min. color slides.
Produced for Mobilization for Survival by Dr. Michio Kaku, noted theoretical physicist, who carefully develops the case against nuclear power by providing a concise analysis of historical events and current data and the weapons link.

The Other Victims of Hiroshima and Nagasaki. 30 min. color video.
About the thousands of U.S. servicemen who entered the cities after the bombings to do clean-up. From Rick Schmeichen.

Commentary or annotations on audiovisual materials came from: Mobilization for Survival, Audio-Visual Resources for Social Change (sponsored by American Friends Service Committee), and a "New Call for Peacemakers" by Maynard Shelly.

BIBLIOGRAPHY

Adams, Ruth, and Cullen, Susan, ed. *The Final Epidemic: Physicians and Scientists on Nuclear War.* Chicago, IL: Educational Foundation for Nuclear Science, 1981. Paper, $4.95.
A collection of talks by leading experts at symposia organized by Physicans for Social Responsibility and Council for A Livable World Education Fund.

Arkin, William F. *Research Guide to Current Military and Strategic Affairs.* Washington, D.C.: Institute for Policy Studies, 1981. Paper, $5.95.
An extremely thorough and invaluable guide for serious research on weapons and security issues.

Barton, John H. *The Politics of Peace: An Evaluation of Arms Control.* Stanford, CA: Stanford University Press, 1981. Hardback, $18.50.
An exceptionally useful broad-brush treatment of the causes of war and the need for arms control, the impact of contemporary arms control, and techniques for implementing and enforcing arms control.

Beeferman, Lawrence, ed. "Cambridge and Nuclear Weapons." Cambridge, MA: City of Cambridge, 1981. (pamphlet)
This pamphlet, commissioned by the Cambridge City Council in reaction to their view of the State Civil Defense plan, outlines the devastation which would result from a nuclear attack and suggests that prevention is the only valid form of defense.

Betts, Richard K., ed. *Cruise Missiles: Technology, Strategy, Politics.* Washington, D.C.: Brookings Institution, 1981. Paper, $15.95.
The U.S. will soon have thousands of unmanned, jet-powered, nuclear-tipped missiles on its bombers, submarines, surface ships, and in NATO facilities in Britain and Europe. This compendium of experts' assessments reveals how little we know about the ultimate desirability and arms control impact of these missiles.

"The Effects of Nuclear War—Summary." Washington, D.C.20510: Congress of U.S./Office of Technology Assessment, 1980. (pamphlet)
Government assessment of the short- and long-term effect of nuclear war, social and economic as well as physical. Avoids consideration of military effects, but does examine full range of nuclear attacks.

Fallows, James. *National Defense.* New York: Random House, 1981. Paper, $4.95.
A lucid, well-documented journalist's critique of American military preparedness, emphasizing overly complex weaponry, unimaginative leadership, and bureaucratic shortsighteness.

Fisher, Roger, and Ury, William. *Getting to Yes: Negotiating Agreement Without Giving In.* Boston: Houghton Mifflin, 1981. Hardback, $10.95.
Using examples from international conflicts and other areas, the process of negotiation is analyzed to critique conventional positional bargaining and to explain how to do interest bargaining for mutual gain.

Gansler, Jacques S. *The Defense Industry.* Cambridge, MA: MIT Press, 1982. Paper, $9.95.
The author criticizes the defense industry for lack for efficiency, excessive dependence on international markets, inability to adjust to purchasing cycles, and lack of over-all structural planning, and he proposes some solutions.

Hersey, John. *Hiroshima.* New York: Bantam Books, 1946. Paper, $2.25.
A classic journalistic account, first published in *The New Yorker* magazine in 1946, on the dropping of the A-bomb on Hiroshima and the events which followed, told in terms of the daily lives of the survivors.

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New Boston Review, December 1981. (monthly)
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The first chapter alone is the best and most profound statement of the dangers and consequences of nuclear war that is currently available. Schell contends that our choice is not between peace and war, but peace and annihilation.

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Unforgettable Fire. New York: Pantheon Books, 1977. $7.95
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Most commentary on reading materials came from the "Selective Annotated Bibliography" of the Curriculum Committee of Educators for Social Responsibility and from "An Annotated Bibliography" by Anthony P. Sager, Esq. of the Lawyers Alliance for Nuclear Arms Control, Inc.